OPERATIONS GUIDE

COMPAQ

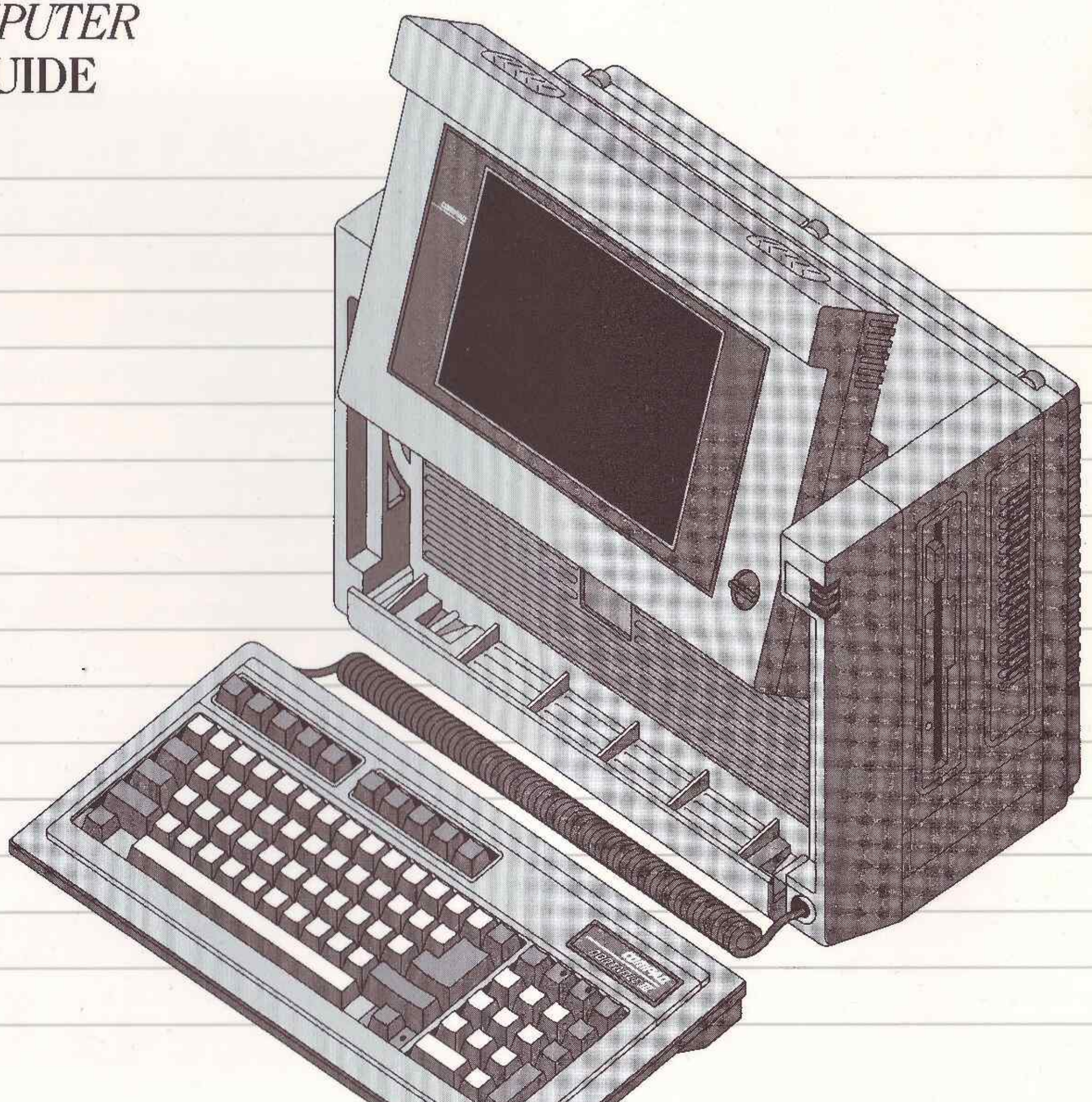
PORTABLE III™

OPERATIONS GUIDE

COMPAQ

PORTABLE III

COMPAQ PORTABLE III™
PERSONAL COMPUTER
OPERATIONS GUIDE



NOTICE

The information in this guide is subject to change without notice.

THIS OPERATIONS GUIDE IS PRESENTED AS IS. COMPAQ COMPUTER CORPORATION SHALL NOT BE LIABLE FOR TECHNICAL OR EDITORIAL OMISSIONS MADE HEREIN; NOR FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE FURNISHING, PERFORMANCE, OR USE OF THIS MATERIAL.

This guide contains information protected by copyright. No part of this guide may be photocopied or reproduced in any form without prior written consent from Compaq Computer Corporation.

Product names mentioned herein are used for identification purposes only, and may be trademarks and/or registered trademarks of their respective companies.

The software described in this guide is furnished under a license agreement. The software may be used or copied only in accordance with the terms of the agreement.

Copyright © 1987 by Compaq Computer Corporation. All rights are reserved.

COMPAQ® is a Registered Trademark of Compaq Computer Corporation.
COMPAQ PORTABLE III™ is a Trademark of Compaq Computer Corporation.
MS-DOS® is a Registered Trademark of Microsoft Corporation.
Intel® is a Registered Trademark of The Intel Corporation.
Torx® is a Registered Trademark of Textron, Inc.
Hayes® is a Registered Trademark of Hayes Microcomputer Products, Inc.

COMPAQ PORTABLE III PERSONAL COMPUTER
OPERATIONS GUIDE

First Edition (February 1987)
Second Edition (September 1987)
Manual Assembly Number 107316-001
Subassembly Number 107317-002
Text Number 107319-002

Compaq Computer Corporation

Compaq Computer Corporation
COMPAQ PORTABLE III Personal Computer
One-Year Limited Warranty

Definitions

This one-year limited Warranty applies to all models of the COMPAQ DESKPRO 386™ Personal Computer, COMPAQ DESKPRO 286™ Personal Computer with a maximum operating speed of twelve (12) megahertz, or COMPAQ PORTABLE III™ Personal Computer. During the one-year period of this Warranty, it also covers any optional or accessory product(s) manufactured or sold by Compaq Computer Corporation ("Compaq") and installed by an Authorized COMPAQ Computer Dealer or an Authorized COMPAQ Warranty Service Provider, in a COMPAQ DESKPRO 386 Personal Computer, a COMPAQ DESKPRO 286 Personal Computer with a maximum operating speed of twelve (12) megahertz, or a COMPAQ PORTABLE III Personal Computer. The COMPAQ DESKPRO 386 Personal Computer, COMPAQ DESKPRO 286 Personal Computer with a maximum operating speed of twelve (12) megahertz, or COMPAQ PORTABLE III Personal Computer and the covered optional or accessory products are the "COMPAQ Products" referred to in this Warranty. This one-year limited Warranty, however, does not apply to the COMPAQ Dual-Mode Monitor, or to any other optional or accessory product not internally installed in the COMPAQ DESKPRO 386 Personal Computer, COMPAQ DESKPRO 286 Personal Computer with a maximum operating speed of twelve (12) megahertz, or COMPAQ PORTABLE III Personal Computer.

You are the "Purchaser", if you are the original purchaser of the COMPAQ Product from either an Authorized COMPAQ Computer Dealer or Compaq. This Warranty only applies to original Purchasers, and is not transferable to anyone who purchases the COMPAQ Product from you.

The "Date of Purchase" is the date you originally purchased the COMPAQ Product, and is shown on the original proof-of-purchase received from the Authorized COMPAQ Computer Dealer or Compaq. Your sales receipt, showing the Date of Purchase, the COMPAQ Product(s) purchased, and the name of the Authorized COMPAQ Computer Dealer that sold you the COMPAQ Product(s), serves as your proof of the Date of Purchase.

Continued...

Warranty

Compaq warrants to you, the Purchaser, that the COMPAQ PORTABLE III Personal Computer you have purchased from an Authorized COMPAQ Computer Dealer or from Compaq is free from defects in materials and workmanship for a period of one year from the Date of Purchase.

Compaq further warrants to you, the Purchaser, that any optional or accessory products manufactured or sold by Compaq, which you purchase on or after the Date of Purchase of the COMPAQ PORTABLE III Personal Computer covered by this limited Warranty, and which are installed in that COMPAQ PORTABLE III Personal Computer by an Authorized COMPAQ Computer Dealer or an Authorized COMPAQ Warranty Service Provider, are free from defects in materials and workmanship for a period of one year from the Date of Purchase of the COMPAQ PORTABLE III Personal Computer in which such COMPAQ Product(s) are installed. If the optional or accessory products are purchased for installation in the COMPAQ PORTABLE III Personal Computer less than 90 days prior to the expiration of the one-year limited Warranty applicable to the COMPAQ PORTABLE III Personal Computer, then the optional or accessory products are covered by the 90-day (ninety-day) limited warranties accompanying such products.

This further warranty does not apply to any optional or accessory products which have previously been installed in any COMPAQ or other computer prior to their installation in the COMPAQ PORTABLE III Personal Computer covered by this limited warranty.

This further warranty also does not apply to the COMPAQ Dual-Mode Monitor or to any other optional or accessory product used in connection with, but not installed in, the COMPAQ PORTABLE III Personal Computer covered by this limited Warranty.

Continued...

Remedies

During the Term of this Warranty, at no additional charge to the Purchaser, Compaq will repair or replace any defective parts of the COMPAQ PORTABLE III Personal Computer purchased under this limited Warranty, or of the optional or accessory products covered by this limited Warranty, with new or, at the option of Compaq, refurbished parts. To obtain this repair or replacement service, the Purchaser must return the COMPAQ Product to an Authorized COMPAQ Computer Dealer or Compaq. The Purchaser also may return the COMPAQ Product to a participating Authorized COMPAQ Computer Warranty Service Provider, at the Service Provider's option. The Purchaser must prepay any shipping charges. In addition, the Purchaser is responsible for insuring any product so returned and assumes the risk of loss during shipping. All parts and products replaced under this Warranty become the property of Compaq.

Continued...

Warranty Claim Requirements

To claim service pursuant to this Warranty you, the Purchaser, must:

1. Provide any Authorized COMPAQ Computer Dealer, Compaq, or a participating Authorized COMPAQ Computer Warranty Service Provider with proof of the Date of Purchase from an Authorized COMPAQ Computer Dealer or Compaq.
2. Return the COMPAQ Product to an Authorized COMPAQ Computer Dealer, Compaq, or at the Service Provider's option, a participating Authorized COMPAQ Computer Warranty Service Provider. The Purchaser must prepay any shipping charges. In addition, the Purchaser is responsible for insuring any product shipped for return, because under this Warranty the Purchaser assumes the risk of loss during shipping.
3. The Purchaser may request information on how to obtain Warranty service by contacting any Authorized COMPAQ Computer Dealer. The Purchaser may call 1-800-231-0900, toll-free, from anywhere in the 48 contiguous United States and Hawaii for the location of the nearest Authorized COMPAQ Computer Dealer; or
4. The Purchaser may also request information on how to obtain Warranty service by writing to the Customer Relations Department at Compaq Computer Corporation, P.O. Box 692000, Houston, Texas 77269-2000.

Continued...

Remedies

During the Term of this Warranty, at no additional charge to the Purchaser, Compaq will repair or replace any defective parts of the COMPAQ PORTABLE III Personal Computer purchased under this limited Warranty, or of the optional or accessory products covered by this limited Warranty, with new or, at the option of Compaq, refurbished parts. To obtain this repair or replacement service, the Purchaser must return the COMPAQ Product to an Authorized COMPAQ Computer Dealer or Compaq. The Purchaser also may return the COMPAQ Product to a participating Authorized COMPAQ Computer Warranty Service Provider, at the Service Provider's option. The Purchaser must prepay any shipping charges. In addition, the Purchaser is responsible for insuring any product so returned and assumes the risk of loss during shipping. All parts and products replaced under this Warranty become the property of Compaq.

Continued...

Warranty Claim Requirements

To claim service pursuant to this Warranty you, the Purchaser, must:

1. Provide any Authorized COMPAQ Computer Dealer, Compaq, or a participating Authorized COMPAQ Computer Warranty Service Provider with proof of the Date of Purchase from an Authorized COMPAQ Computer Dealer or Compaq.
2. Return the COMPAQ Product to an Authorized COMPAQ Computer Dealer, Compaq, or at the Service Provider's option, a participating Authorized COMPAQ Computer Warranty Service Provider. The Purchaser must prepay any shipping charges. In addition, the Purchaser is responsible for insuring any product shipped for return, because under this Warranty the Purchaser assumes the risk of loss during shipping.
3. The Purchaser may request information on how to obtain Warranty service by contacting any Authorized COMPAQ Computer Dealer. The Purchaser may call 1-800-231-0900, toll-free, from anywhere in the 48 contiguous United States and Hawaii for the location of the nearest Authorized COMPAQ Computer Dealer; or
4. The Purchaser may also request information on how to obtain Warranty service by writing to the Customer Relations Department at Compaq Computer Corporation, P.O. Box 692000, Houston, Texas 77269-2000.

Continued...

Disclaimers

THIS LIMITED WARRANTY DOES NOT EXTEND TO ANY PRODUCTS NOT PURCHASED FROM COMPAQ OR AN AUTHORIZED COMPAQ COMPUTER DEALER. THIS LIMITED WARRANTY ALSO DOES NOT EXTEND TO ANY PRODUCTS WHICH HAVE BEEN DAMAGED OR RENDERED DEFECTIVE (A) AS A RESULT OF ACCIDENT, MISUSE, OR ABUSE; (B) BY THE USE OF PARTS NOT MANUFACTURED OR SOLD BY COMPAQ; (C) BY MODIFICATION, OR (D) AS A RESULT OF SERVICE BY ANYONE OTHER THAN COMPAQ, AN AUTHORIZED COMPAQ COMPUTER DEALER, OR AN AUTHORIZED COMPAQ COMPUTER WARRANTY SERVICE PROVIDER.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, COMPAQ MAKES NO OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND COMPAQ EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. IN THE EVENT THE PRODUCT IS NOT FREE FROM DEFECTS AS WARRANTED ABOVE, YOUR SOLE REMEDY AS THE PURCHASER SHALL BE REPAIR OR REPLACEMENT AS PROVIDED ABOVE. UNDER NO CIRCUMSTANCES WILL COMPAQ BE LIABLE TO THE PURCHASER, OR TO ANY USER, FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS, OR OTHER DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE THE COMPAQ PRODUCT.

ANY IMPLIED WARRANTIES ARE LIMITED TO THE TERM OF THIS EXPRESS LIMITED WARRANTY.

SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR CONSUMER PRODUCTS, AND SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO YOU.

THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

Continued...

WARNING

The COMPAQ PORTABLE III Personal Computer has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC Rules. Only peripherals (computer input/output devices, terminals, printers etc.) certified to comply with the Class B limits may be attached to this computer. Operation with non-certified peripherals is likely to result in interference to radio and TV reception.

Continued...

WARNING

This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the manufacturer's instructions, it may cause interference with radio and television reception. This equipment has been certified to comply with the limits for a Class B computing device, pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference. Operating this equipment in a residential area can cause interference. Should this occur, the user will be required to take whatever measures may be necessary to eliminate the interference. In attempting to do so, the user should do the following:

- ☐ Reorient the receiving antenna.
- ☐ Relocate the computer with respect to the receiver with which it interferes.
- ☐ Plug the computer into a different AC outlet so that the computer and the receiver with which it interferes are on different branch circuits.

If necessary, the user should consult the dealer or an experienced radio/television technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful.

INTERFERENCE HANDBOOK, 1986

This booklet is available from the US Government Printing Office, Washington, DC 20402, Stock Number 004-000-00450-7.

Continued...

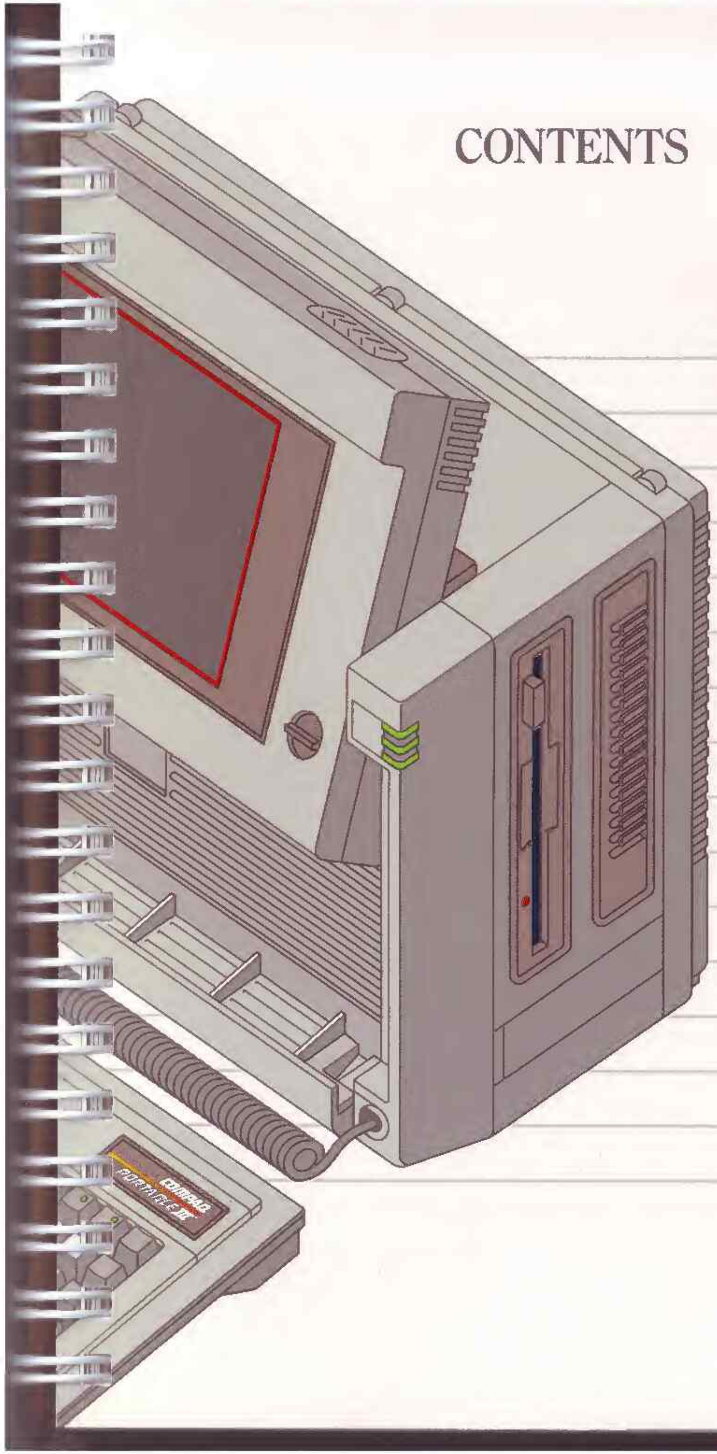
NOTICE

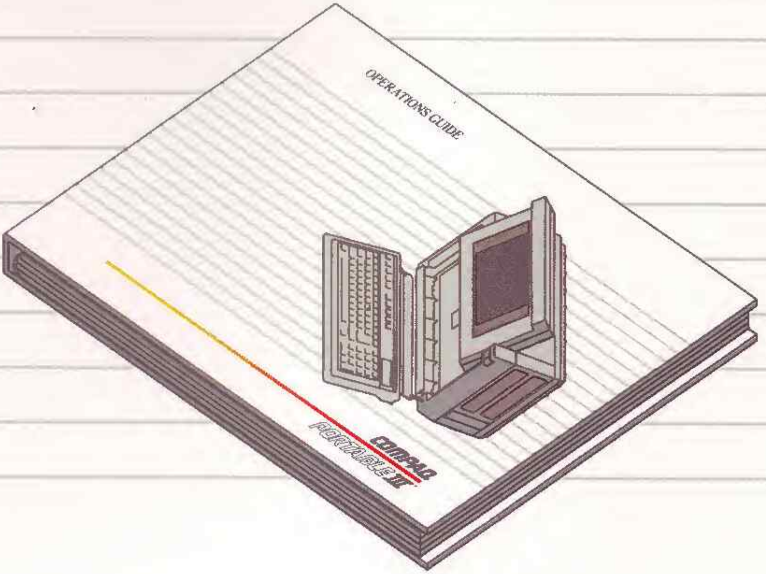
Compaq Computer Corporation requires that all peripheral devices be connected to this computer via shielded cables with metal RFI/EMI connector hoods.

WIRE TYPE:	Multi-paired overall-shielded Belden #98XX, Alpha #54XX; or equivalent.
CONNECTOR HOOD	RFI/EMI metal shield; AMP #74517X-X; or equivalent.

It is important that the chassis ground strap of the peripheral device be connected to the computer chassis. An Alpha #1221 flat-braid strap is sufficient. This strap is not necessary if the shielded cable connects the two chassis.

CONTENTS


COMPAQ
PORTABLE III


OPERATIONS GUIDE
COMPAQ
PORTABLE III

CONTENTS

Chapter 1

INTRODUCTION

1.1 INTRODUCTION 1-1
1.2 HOW THIS GUIDE IS ORGANIZED 1-2
1.3 MANUAL CONVENTIONS 1-5
1.4 PRODUCT REVIEW 1-5

Chapter 2

GETTING STARTED

2.1 INTRODUCTION 2-1
2.2 SETTING UP THE COMPAQ PORTABLE III PERSONAL COMPUTER 2-1
    Positioning the System Unit for Use 2-1
    Positioning the Keyboard for Use 2-2
    Positioning the COMPAQ Dual-Mode Plasma Display for Use 2-3
    Drive Positions 2-4
    Power/Drive Light-Emitting Diode (LED) Indicators 2-5
2.3 THE FIXED DISK DRIVE 2-5
2.4 DISKETTE DRIVES 2-6
2.5 IDENTIFYING THE INTERFACE CONNECTORS 2-7
2.6 CONNECTING PERIPHERAL DEVICES 2-7
2.7 CONNECTING THE COMPUTER TO A POWER SOURCE 2-8
2.8 INSERTING A DISKETTE 2-8
2.9 TURNING ON THE COMPUTER 2-9

2.10 SYSTEM SELF-TEST 2-9
2.11 CPU PROCESSING SPEEDS 2-10
2.12 ADJUSTING THE COMPAQ DUAL-MODE PLASMA DISPLAY BRIGHTNESS 2-12
2.13 PREPARING YOUR SYSTEM FOR USE 2-12

Chapter 3
INITIALIZING YOUR SYSTEM

3.1 INTRODUCTION 3-1
3.2 REVIEWING YOUR DISKETTES 3-1
  USER DIAGNOSTICS Diskette 3-1
  USER PROGRAMS Diskette 3-2
3.3 INITIALIZATION PROCEDURES 3-5
3.4 RUNNING SETUP 3-6
3.5 RUNNING THE DIAGNOSTIC TESTS 3-7
3.6 DIAGNOSTICS MAIN MENU 3-8
  Format a Diskette (Diagnostics Only) 3-8
  Copy a Diskette (Diagnostics Only) 3-8
  Display ROM Versions 3-8
  Installed Device List 3-8
3.7 INITIALIZING YOUR FIXED DISK (DISKINIT) 3-9
3.8 COPYING THE USER PROGRAMS DISKETTE 3-10
3.9 COPYING SETUP TO YOUR FIXED DISK 3-10
3.10 COPYING DISKETTES 3-10

Chapter 4
MOVING YOUR COMPUTER

4.1 INTRODUCTION 4-1
4.2 MOVING YOUR COMPUTER 4-1
  Saving Your Files 4-1
  Turning Off the Computer 4-1
  Replacing the Diskette 4-1
  Disconnecting the AC Power Cord and Peripheral Devices 4-1
  Lowering the COMPAQ Dual-Mode Plasma Display 4-2
  Securing the Keyboard 4-2
4.3 TRAVELING INTERNATIONALLY WITH YOUR COMPUTER 4-4

Chapter 5
MULTIPLE KEYSTROKES

5.1 INTRODUCTION 5-1
5.2 MULTIPLE KEY FUNCTIONS 5-1

Chapter 6

COMPAQ DUAL-MODE PLASMA DISPLAY

6.1 INTRODUCTION 6-1
6.2 FEATURES OF THE COMPAQ DUAL-MODE PLASMA DISPLAY 6-1
6.3 TEXT CHARACTERISTICS 6-3
6.4 SETTING UP YOUR DISPLAY PARAMETERS 6-4
6.5 USING SETUP TO SET HIGHLIGHTED TEXT 6-4
6.6 USING THE MODE COMMAND TO SET HIGHLIGHTED TEXT 6-5
6.7 ADDITIONAL MODE COMMAND FEATURES 6-5
    MODE SCREEN-SAVE 6-5
    MODE SELECT 6-6
    MODE UNDERLINE 6-7
6.8 USING CHARSET 6-8
6.9 USING ADAPT 6-9

Chapter 7

SYSTEM BOARD SWITCH AND JUMPERS

7.1 INTRODUCTION 7-1
7.2 ACCESSING THE SYSTEM BOARD 7-1
    Preparation 7-1
    Removing the Rear Panel 7-2
7.3 SETTING THE SYSTEM BOARD SWITCH 7-3
7.4 SETTING THE JUMPERS 7-4
7.5 REPLACING THE REAR PANEL 7-4

Chapter 8
OPTIONS

- 8.1 INTRODUCTION 8-1
- 8.2 OPTIONS 8-2
  - 20-Megabyte Fixed Disk Drive 8-3
  - 40-Megabyte Fixed Disk Drive 8-3
  - 40-Megabyte Fixed Disk Drive Backup Expansion Unit 8-4
  - DC-2000 Tape Cartridge 8-5
  - 360-Kbyte Diskette Drive 8-5
  - COMPAQ 1200 Baud Internal Modem 8-6
  - COMPAQ 2400 Baud Internal Modem 8-6
  - Expansion Unit 8-7
  - 16-Bit Memory/Modem Interface Board 8-7
  - 512-Kbyte Memory Option Kit 8-8
  - 2-Megabyte Memory Option Kit 8-9
  - Memory Expansion Board 8-10
  - 8-MHz 80287 Coprocessor 8-10
  - COMPAQ Color Monitor 8-11
  - COMPAQ Enhanced Color Graphics Board 8-11
  - Asynchronous Communications/Parallel Printer Board 8-12
  - Second Asynchronous Communications Interface Board 8-12
  - Desktop Pedestal 8-13
  - Carrying Case 8-13
  - MS-DOS/BASIC Version 3 8-14
  - *COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE* 8-14
  - *COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE* 8-15

Appendix A
PHYSICAL AND OPERATING SPECIFICATIONS A-1

Appendix B
ERROR CODES B-1

Appendix C
COMPAQ DUAL-MODE PLASMA DISPLAY
APPLICATION INSTALLATION EXAMPLES C-1

Appendix D
GLOSSARY D-1

INDEX I-1

FIGURES

1-1. COMPAQ PORTABLE III Personal Computer 1-1
2-1. Positioning the System Unit 2-1
2-2. Keyboard Feet 2-2
2-3. Keyboard Latches 2-2
2-4. Lifting the Keyboard Cord Out of the Cable Storage Tray 2-3
2-5. Releasing the Plasma Display From the Locked Position 2-3
2-6. Plasma Display in an Upward Position 2-4
2-7. Drive Positions on the COMPAQ PORTABLE III Personal Computer 2-4
2-8. Location of LED Indicators 2-5
2-9. Fixed Disk Drive Type Label 2-5
2-10. Interface Connectors on the Back of the COMPAQ PORTABLE III Personal Computer 2-7
2-11. Inserting a Diskette into the Diskette Drive 2-8
2-12. Location of Button on Diskette Drive 2-8
2-13. ON/OFF Switch 2-9
2-14. Brightness Control Knob 2-12

FIGURES

4-1. Lowering the COMPAQ Dual-Mode Plasma Display 4-2
4-2. Securing the Keyboard 4-2
4-3. Moving your COMPAQ PORTABLE III Personal Computer 4-3
6-1. COMPAQ Dual-Mode Plasma Display 6-1
7-1. Location of Rear Panel Screws and Washers 7-2
7-2. System Board 7-2
7-3. Eight-Position Switch 7-3
7-4. Jumpers 7-4
7-5. Replacing the Rear Panel 7-5
8-1. 20-Megabyte Fixed Disk Drive Option Kit 8-3
8-2. 40-Megabyte Fixed Disk Drive Option Kit 8-3
8-3. 40-Megabyte Fixed Disk Drive Backup Expansion Unit 8-4
8-4. DC-2000 Tape Cartridge 8-5
8-5. 360-Kbyte Diskette Drive Option Kit 8-5
8-6. COMPAQ 1200 Baud Internal Modem Option Kit 8-6
8-7. COMPAQ 2400 Baud Internal Modem Option Kit 8-6
8-8. Expansion Unit 8-7
8-9. 16-Bit Memory/Modem Interface Board 8-7
8-10. 512-Kbyte Memory Option Kit 8-8

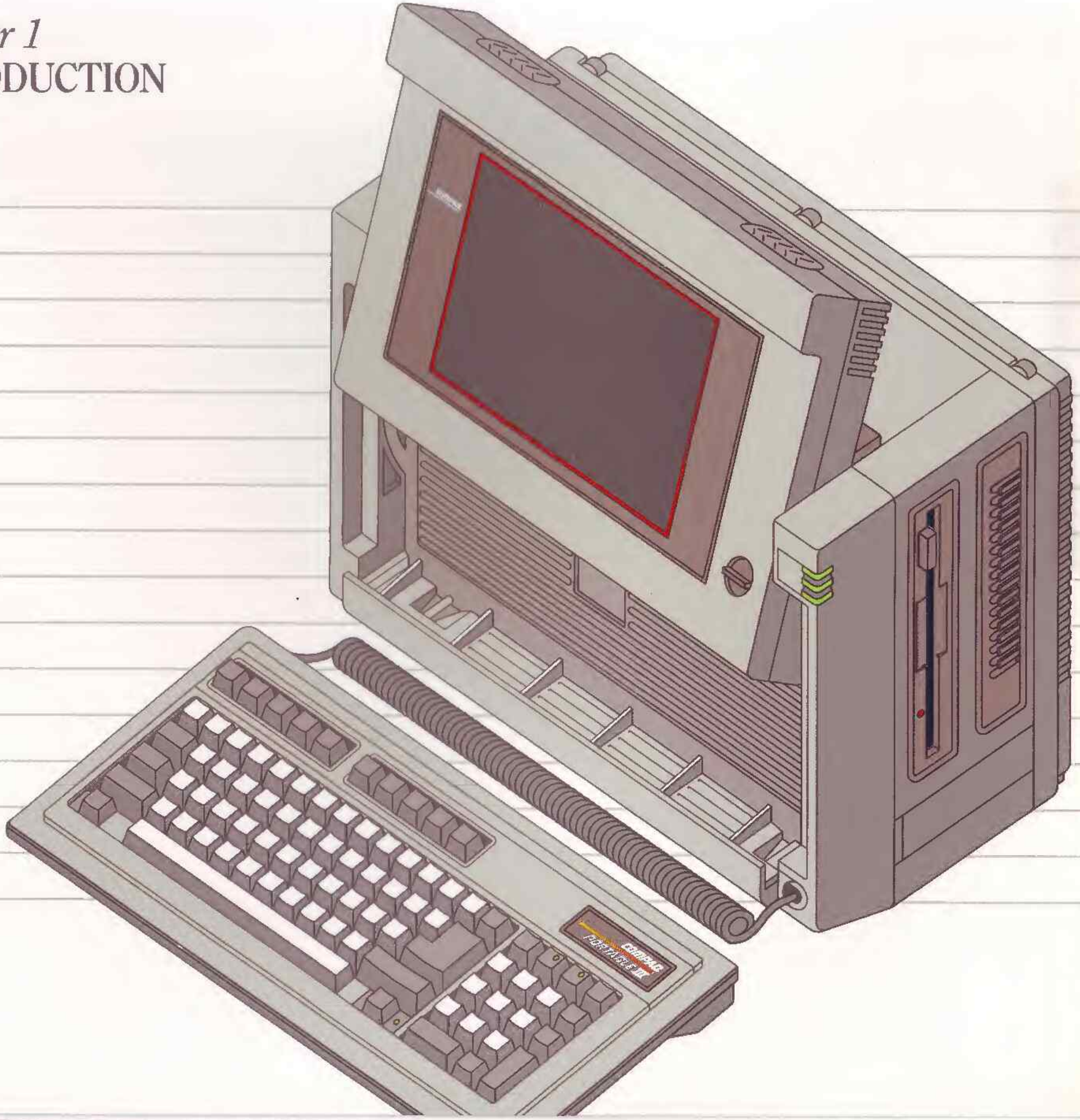
FIGURES

8-11. 2-Megabyte Memory Option Kit 8-9
8-12. Memory Expansion Board and 16-Bit Memory/Modem Interface Board 8-10
8-13. 8-MHz 80287 Coprocessor 8-10
8-14. COMPAQ Color Monitor 8-11
8-15. COMPAQ Enhanced Color Graphics Board 8-11
8-16. Asynchronous Communications/Parallel Printer Board 8-12
8-17. Second Asynchronous Communications Interface Board 8-12
8-18. Desktop Pedestal 8-13
8-19. Carrying Case 8-13
8-20. MS-DOS/BASIC Version 3.2 Option Kit 8-14
8-21. *COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE* 8-14
8-22. *COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE* 8-15

TABLES

2-1. CPU Processing Speeds 2-10
5-1. Multiple Key Functions 5-1
6-1. MODE ATTRIBUTE Parameters 6-5
6-2. MODE SELECT Parameters 6-6
6-3. MODE UNDERLINE Parameters 6-7
8-1. Total System Memory with Addition of 512-Kbyte Memory Option Kits 8-7
8-2. Total System Memory with Addition of 2-Megabyte Memory Option Kits 8-8
A-1. Electrical and Mechanical Specifications A-1
A-2. Keyboard Assembly Specifications A-2
A-3. COMPAQ Dual-Mode Plasma Display Specifications A-3
A-4. Expansion Unit Specifications A-4
A-5. 40-Megabyte Fixed Disk Drive Backup Expansion Unit Specifications A-4
B-1. Error Codes B-1

Chapter 1
INTRODUCTION


COMPAQ
PORTABLE III

Chapter 1 INTRODUCTION
Chapter 2 GETTING STARTED
Chapter 3 INITIALIZING YOUR SYSTEM

CONTENTS

Chapter 1
INTRODUCTION

1.1 INTRODUCTION 1-1
1.2 HOW THIS GUIDE IS ORGANIZED 1-2
1.3 MANUAL CONVENTIONS 1-5
1.4 PRODUCT REVIEW 1-5

Chapter 1
INTRODUCTION

1.1 INTRODUCTION

This operations guide introduces the COMPAQ PORTABLE III™ Personal Computer, a portable personal computer that provides full functionality in the smallest, lightest package available. Based on the 80286 microprocessor, it includes two storage devices (a 5¼-inch diskette drive and an internal fixed disk drive), memory expansion up to 6.6 megabytes, a full-size detachable keyboard, and an adjustable COMPAQ® Dual-Mode Plasma Display. Small enough to be placed beneath the seat of an airplane or stored in a file drawer, and light enough to be easily carried from office to home, the COMPAQ PORTABLE III Personal Computer is truly portable (Figure 1-1).

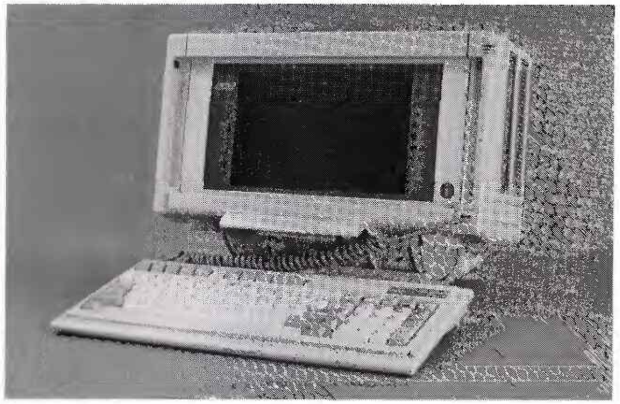


Figure 1-1. COMPAQ PORTABLE III Personal Computer.

We recommend using MS-DOS Version 3, Release 3.2 or higher as published by Compaq Computer Corporation because it contains many utilities that have been designed specifically for COMPAQ computer products. Regardless of the operating system chosen, it is very important that you become familiar with both this operations guide and the one for the selected operating system. For more information about the special MS-DOS utilities designed for this system, refer to the ***SUPPLEMENTAL SOFTWARE GUIDE***, supplied with the computer.

1.2 HOW THIS GUIDE IS ORGANIZED

This ***COMPAQ PORTABLE III PERSONAL COMPUTER OPERATIONS GUIDE*** is divided into eight chapters, four appendices, and an index.

Chapter 1	INTRODUCTION provides a general introduction to this guide, a brief statement about the contents of each chapter and appendix, a description of manual conventions, and a list of the features of the COMPAQ PORTABLE III Personal Computer.

Chapter 2	GETTING STARTED describes the procedures to follow when the COMPAQ PORTABLE III Personal Computer is used for the first time. These include setting up the computer, connecting a printer, inserting a diskette, using the system self-test, changing operating speeds, and adjusting the COMPAQ Dual-Mode Plasma Display.
Chapter 3	INITIALIZING YOUR SYSTEM describes the procedures to follow if your dealer has not set up your system for use. These procedures include running the SETUP and the optional TEST programs; as.well as, procedures to follow to partition and format a fixed disk drive. It also includes a list of all the programs on the diskettes supplied with your computer.
Chapter 4	MOVING YOUR COMPUTER describes the steps to take when moving your COMPAQ PORTABLE III Personal Computer and the steps necessary when traveling abroad with your computer.
Chapter 5	MULTIPLE KEYSTROKES describes the multiple key functions for the COMPAQ PORTABLE III Personal Computer keyboard.
Chapter 6	COMPAQ DUAL-MODE PLASMA DISPLAY describes the features of the plasma display and provides instructions for its operation.
Chapter 7	SYSTEM BOARD SWITCH AND JUMPERS describes the switch and jumpers on the system board that you can configure.

Chapter 8	**OPTIONS** provides a brief description of the options you can purchase for your COMPAQ PORTABLE III Personal Computer.
Appendix A	**PHYSICAL AND OPERATING SPECIFICATIONS** provides the physical and operating specifications of the COMPAQ PORTABLE III Personal Computer.
Appendix B	**ERROR CODES** describes the error codes that may be encountered when the computer performs the Power-On Self-Test. Each error code is identified and explained. Instructions are also provided for steps to follow when encountering each error code.
Appendix C	**APPLICATION INSTALLATION EXAMPLES** supplies examples for using the COMPAQ Dual-mode Plasma Display.
Appendix D	**GLOSSARY** provides an alphabetical list of terms found in this guide together with a definition of each term.
Index	This section is provided to help you locate specific information throughout this guide.

1.3 MANUAL CONVENTIONS

A few conventions are used throughout this guide:

☐ Keys that you are to press are shown in **UPPERCASE BOLD.**

☐ Names of programs are shown in UPPERCASE. For example, run SETUP means that you are to run the program named "Setup."

1.4 PRODUCT REVIEW

The COMPAQ PORTABLE III Personal Computer is designed to meet the needs of serious business users. It is a high-performance, full-function portable computer.

The COMPAQ PORTABLE III Personal Computer maintains high standards for ruggedness and reliability. As with all COMPAQ computer products, a specially designed aluminum frame and high density shock mounts provide a protective housing for the mass storage devices.

Options to enhance the performance and convenience of the COMPAQ PORTABLE III Personal Computer are available for purchase from your Authorized COMPAQ Computer Dealer.

The COMPAQ PORTABLE III Personal Computer is available in two models.

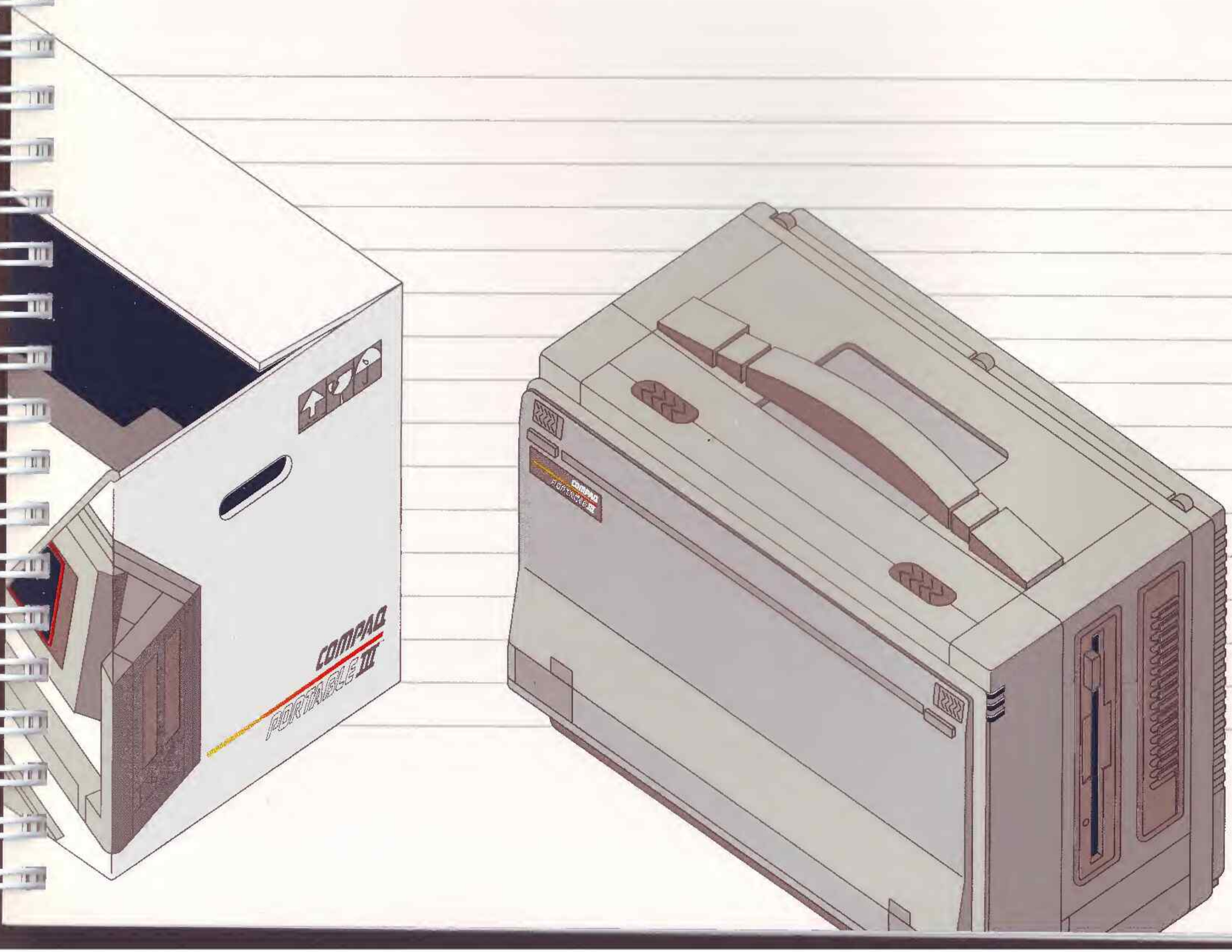
Model 20 includes:

- ☐ 12-MHz 80286 microprocessor
- ☐ 5¼-Inch 1.2-megabyte diskette drive
- ☐ 20-Megabyte fixed disk drive
- ☐ 640 Kbytes of random-access memory (RAM)
- ☐ Adjustable COMPAQ Dual-Mode Plasma Display
- ☐ Detachable, full-size keyboard with standard layout
- ☐ Socket for an 8-MHz 80287 coprocessor
- ☐ Asynchronous communications (serial) interface
- ☐ Parallel interface
- ☐ RGBI interface for external color monitor
- ☐ 145-Watt power supply
- ☐ Automatic line selecting feature for 110/220 volt selection
- ☐ Real-time clock/calendar

Model 40 includes:

- ☐ 12-MHz 80286 microprocessor
- ☐ 5¼-Inch 1.2-megabyte diskette drive
- ☐ 40-Megabyte fixed disk drive
- ☐ 640 Kbytes of random-access memory (RAM)
- ☐ Adjustable COMPAQ Dual-Mode Plasma Display
- ☐ Detachable, full-size keyboard with standard layout
- ☐ Socket for an 8-MHz 80287 coprocessor
- ☐ Asynchronous communications (serial) interface
- ☐ Parallel interface
- ☐ RGBI interface for external color monitor
- ☐ 145-Watt power supply
- ☐ Automatic line selecting feature for 110/220 volt selection
- ☐ Real-time clock/calendar

Chapter 2
GETTING STARTED


COMPAQ
PORTABLE III
COMPAQ
PORTABLE III

CONTENTS

Chapter 2
GETTING STARTED

2.1 INTRODUCTION 2-1
2.2 SETTING UP THE COMPAQ PORTABLE III PERSONAL COMPUTER 2-1
  Positioning the System Unit for Use 2-1
  Positioning the Keyboard for Use 2-2
  Positioning the COMPAQ Dual-Mode Plasma Display for Use 2-3
  Drive Positions 2-4
  Power/Drive Light-Emitting Diode (LED) Indicators 2-5
2.3 THE FIXED DISK DRIVE 2-5
2.4 DISKETTE DRIVES 2-6
2.5 IDENTIFYING THE INTERFACE CONNECTORS 2-7
2.6 CONNECTING PERIPHERAL DEVICES 2-7
2.7 CONNECTING THE COMPUTER TO A POWER SOURCE 2-8
2.8 INSERTING A DISKETTE 2-8
2.9 TURNING ON THE COMPUTER 2-9
2.10 SYSTEM SELF-TEST 2-9
2.11 CPU PROCESSING SPEEDS 2-10
2.12 ADJUSTING THE COMPAQ DUAL-MODE PLASMA DISPLAY BRIGHTNESS 2-12
2.13 PREPARING YOUR SYSTEM FOR USE 2-12

Chapter 2
GETTING STARTED

2.1 INTRODUCTION

This chapter describes the procedures to follow when you use your COMPAQ PORTABLE III™ Personal Computer for the first time.

2.2 SETTING UP THE COMPAQ PORTABLE III PERSONAL COMPUTER

Your COMPAQ PORTABLE III Personal Computer is shipped in a carton that was designed to protect the computer from being damaged during shipment.

Positioning the System Unit for Use

Remove the computer from its shipping carton and position it on a flat, sturdy surface so that the handle is facing up and the mass storage devices face right (Figure 2-1).

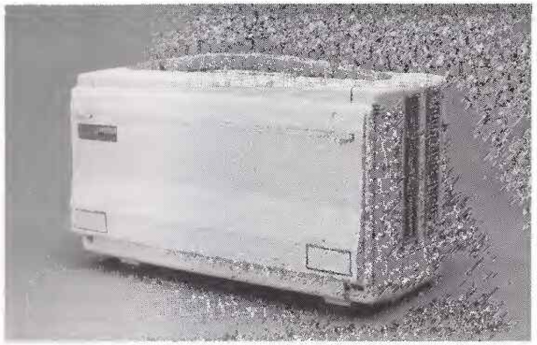


Figure 2-1. Positioning the System Unit.

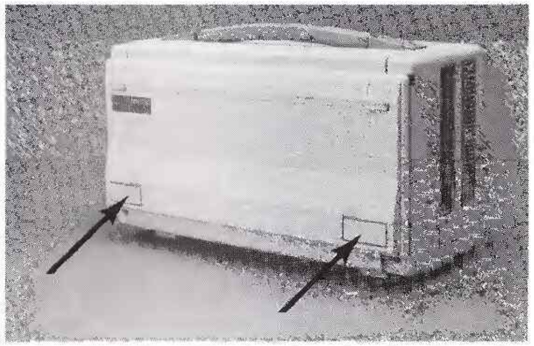


Figure 2-2. Keyboard Feet.

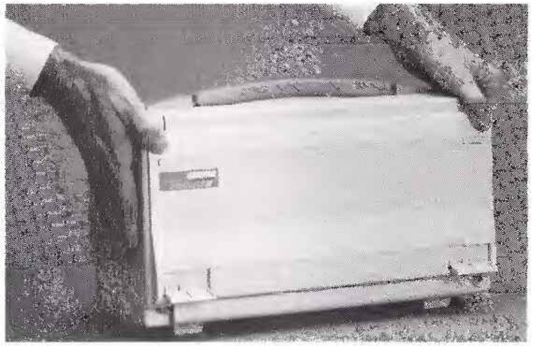


Figure 2-3. Keyboard Latches.

In this position, the ON/OFF switch, the power socket, and the RGBI, parallel, and asynchronous communications interfaces are all facing away from you.

CAUTION

For proper ventilation of your system, you must provide at least three inches of clearance on all sides of the computer.

Positioning the Keyboard for Use

The keyboard acts as a cover for the front of the COMPAQ PORTABLE III Personal Computer and faces you when the computer has been positioned for use.

Two hinged feet are located on the bottom of the keyboard base (Figure 2-2). Pulling these feet out angles the keyboard for more comfort while using the computer.

Locate the two latches near the top edge of the keyboard base (one on each side) that lock the keyboard into place (Figure 2-3).

To release the keyboard, slide each latch toward the center of the keyboard. Lift the keyboard away from the computer and place it on the work surface.

A flexible coiled cord connects the keyboard to the computer. This cord is stored in a cable storage tray in front of the COMPAQ Dual-Mode Plasma Display. Lift the cord out of the tray so you can position the keyboard (Figure 2-4).

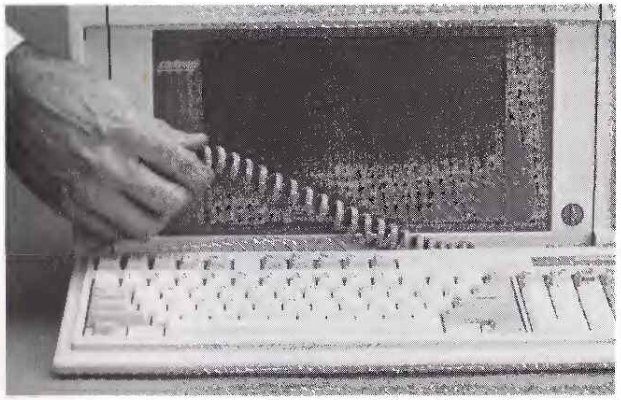


Figure 2-4. Lifting the Keyboard Cord Out of the Cable Storage Tray.

Positioning the COMPAQ Dual-Mode Plasma Display for Use

With the keyboard lowered, the plasma display is now visible. You can leave it in its locked position or adjust it into a more comfortable viewing position. To adjust the viewing position of the plasma display, follow these instructions:

1. Locate the two latches situated near the outside edges of the top of the computer in front of the handle.
2. Press these latches to release the plasma display from the locked position (Figure 2-5).

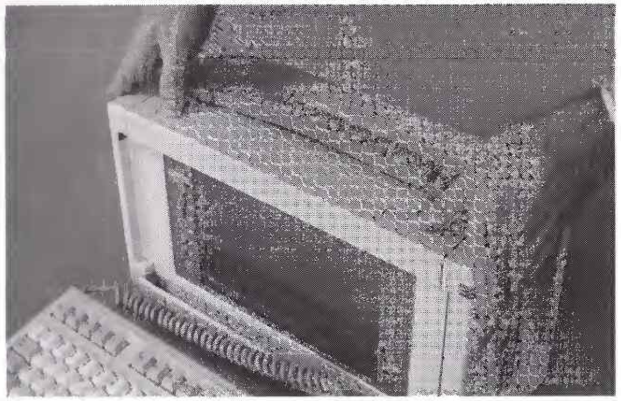


Figure 2-5. Releasing the Plasma Display from the Locked Position.

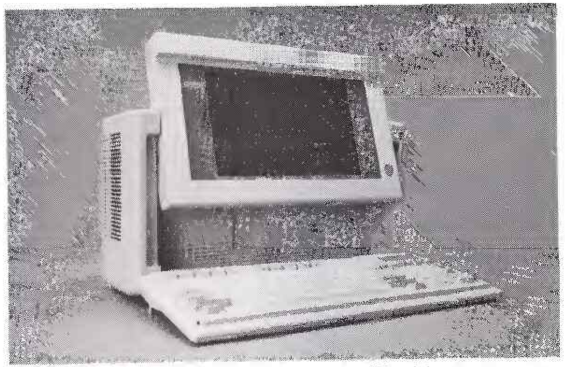


Figure 2-6. Plasma Display in an Upward Position.

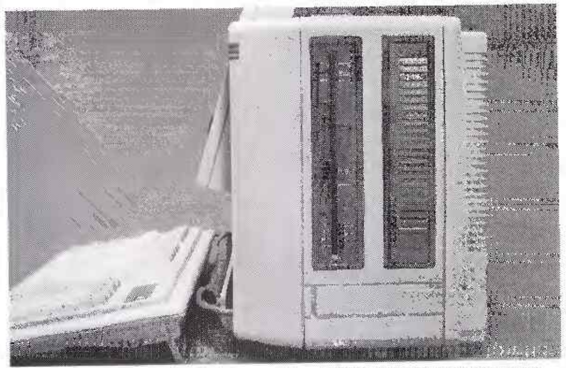


Figure 2-7. Drive Positions on the COMPAQ PORTABLE III Personal Computer.

3. Pull the plasma display toward you and raise it into its upward position.
4. Tilt it into a comfortable viewing position (Figure 2-6).

Drive Positions

The COMPAQ PORTABLE III Personal Computer has two positions where mass storage devices can be installed. Both drive positions are located on the right side as you face the computer (Figure 2-7).

Power/Drive Light-Emitting Diode (LED) Indicators

Three green LED indicators are located at the upper-right corner of the front of the computer (Figure 2-8). They are labeled POWER, 1, and 2.

The top LED indicator is always lit whenever the computer is on. The middle LED indicator is lit when the diskette drive is in use. The lower LED indicator is lit when the fixed disk drive is in use.

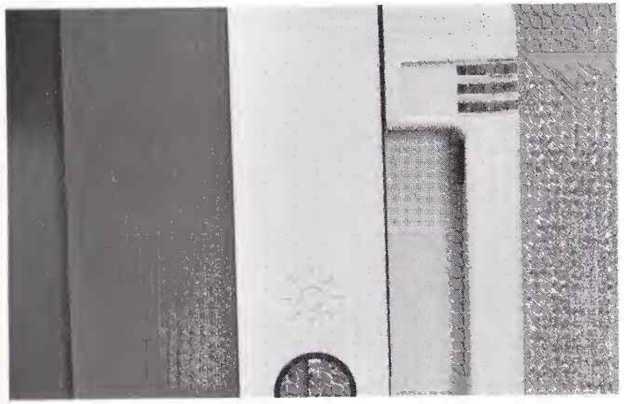


Figure 2-8. Location of LED Indicators.

2.3 THE FIXED DISK DRIVE

Your fixed disk drive is located in Drive Position 2 and a removable drive type label is affixed to the front bezel of the system unit (Figure 2-9).

Copy the number of the drive type from the label and record it in the space provided below. This number identifies the type of fixed disk drive installed in your computer. You will need this information when you run the SETUP program.

DRIVE TYPE NUMBER: ______________________

(record number here)

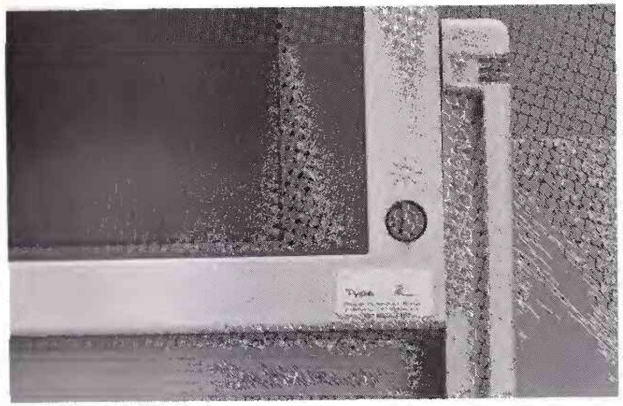


Figure 2-9. Fixed Disk Drive Type Label.

2.4 DISKETTE DRIVES

A 1.2-megabyte diskette drive, standard on all COMPAQ PORTABLE III Personal Computers, is located in Drive Position 1. An optional 5¼-inch, 360-Kbyte diskette drive is also available for media compatibility.

Each 5¼-inch diskette drive uses a specific kind of diskette. For example:

☐ The 1.2-megabyte diskette drive uses a double-sided, high-density, 1.2-megabyte capacity diskette.

☐ The 360-Kbyte diskette drive uses a double-sided, double-density, 360-Kbyte capacity diskette.

NOTE: Although the 1.2-megabyte diskette drive and the 360-Kbyte diskette drive both use 5¼-inch diskettes, we recommend that you write on diskettes that are the same capacity as your diskette drives. For further information on formatting diskettes, refer to the FORMAT command in your *MS-DOS VERSION 3 REFERENCE GUIDE*.

Each diskette drive has an LED indicator that is lit when the drive is in use. The LED indicator on the 1.2-megabyte diskette drive changes color to indicate the capacity of the diskette it is accessing. This LED indicator is:

☐ Clear when the diskette drive is not in use.

☐ Green when accessing a 1.2-megabyte diskette.

☐ Orange when accessing a 360-Kbyte diskette.

The LED on the 360-Kbyte diskette drive is always red.

All COMPAQ personal computers are shipped with a cardboard retainer inserted in the diskette drive. Remove the cardboard retainer from your diskette drive.

2.5 IDENTIFYING THE INTERFACE CONNECTORS

Three interfaces are located next to the ON/OFF switch on the back of the unit (Figure 2-10).

These connectors are:

☐ A 9-Pin RGBI Interface Connector

☐ A 9-Pin Asynchronous Communications (Serial) Interface

☐ A 25-Pin Parallel Interface

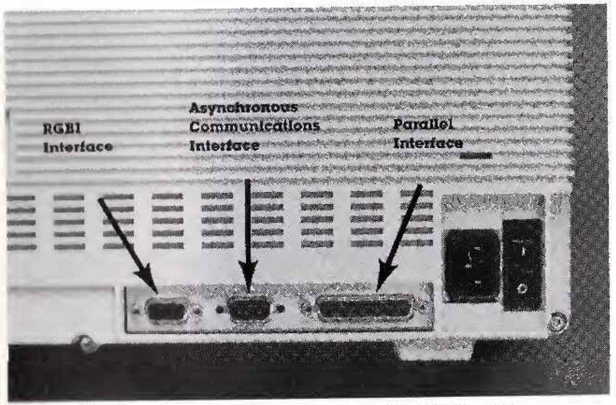


Figure 2-10. Interface Connectors on the Back of the COMPAQ PORTABLE III Personal Computer.

2.6 CONNECTING PERIPHERAL DEVICES

The documentation that came with your printer indicates whether the printer you are connecting requires a parallel or an asynchronous communications (serial) interface. Follow the printer manufacturer's instructions for connecting the printer to the appropriate parallel or asynchronous communications interface. Connect any other peripheral devices, such as an optional expansion unit or color monitor, at this time.

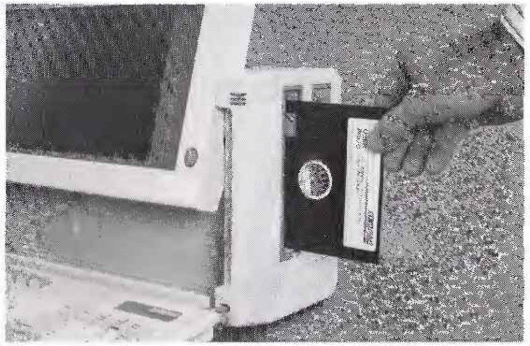


Figure 2-11. Inserting a Diskette into the Diskette Drive.

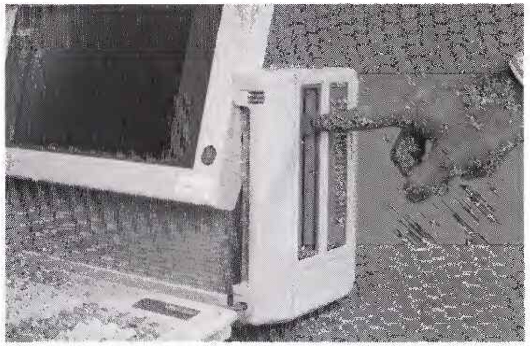


Figure 2-12. Location of Button on Diskette Drive.

2.7 CONNECTING THE COMPUTER TO A POWER SOURCE

Connect the AC power cord that came with your COMPAQ PORTABLE III Personal Computer into the back of the computer and a well-grounded AC outlet.

2.8 INSERTING A DISKETTE

Hold the diskette with the front of the diskette label facing you and insert it into the open diskette drive slot (Figure 2-11).

Press the diskette drive button in until it locks (Figure 2-12).

The edge of the diskette remains visible, even when the diskette is completely inserted.

To eject the diskette, press in on the button on the diskette drive.

2.9 TURNING ON THE COMPUTER

The ON/OFF switch is located on the back of the computer next to the power socket. The numbers 0 (OFF) and 1 (ON) are marked on opposite ends of the switch. Press the top of the switch labeled 1 to turn on the computer (Figure 2-13).

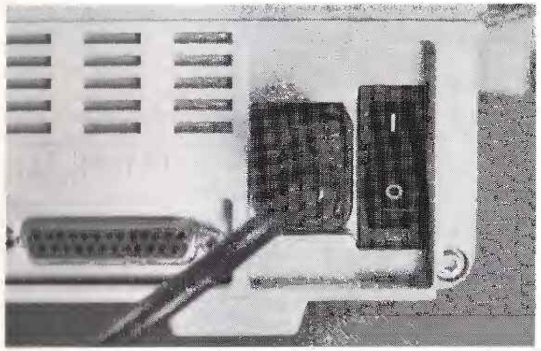


Figure 2-13. ON/OFF Switch.

2.10 SYSTEM SELF-TEST

The computer performs a self-test when it is first turned on to determine that everything is operating normally. You will note the following occurrences during this system self-test:

- ☐ The power LED indicator (in the upper-right corner of your computer) comes on.
- ☐ The keyboard LED indicators blink.

- ☐ The memory is then tested and the total amount of system memory is displayed in the upper-left corner of the screen.
- ☐ The fixed disk drive LED indicator and the diskette drive LED indicators blink.
- ☐ If no problems are found, the system beeps and the operating system prompt appears.

If the system detects a problem during the system self-test, an error message appears on the screen. Refer to *Appendix B,* ERROR CODES, for a list of the error codes and their meanings.

2.11 CPU PROCESSING SPEEDS

The COMPAQ PORTABLE III Personal Computer can operate in HIGH, FAST, or AUTO mode. In HIGH mode, the computer operates at 12 MHz; in FAST mode, it operates at 8 MHz; and in AUTO mode it operates at 12 MHz, changing to 8 MHz when accessing the diskette drive as required by certain application programs. Regardless of the speed at which the COMPAQ PORTABLE III Personal Computer operates, the boards in the optional expansion unit always run at 8 MHz. The computer boots up in AUTO mode.

The operating speed of the computer may be changed in one of two ways:

☐ By pressing and holding the CTRL and ALT keys and then pressing the \ (BACKSLASH) key. (On keyboards other than U.S. English, press the key to the left of the BACKSPACE key instead of the \ (BACKSLASH) key.)

☐ By issuing the following MS-DOS MODE SPEED command:

```
[d:][path]MODE SPE[ed][=][FAS[t]|HIG[h]|AUT[o]]
```

where elements within square brackets [ ] are optional. The three optional parameters are listed in Table 2-1.

Table 2-1. CPU Processing Speeds

Parameter	Processing Speed
FAS[t]	8-MHz CPU
HIG[h]	12-MHz CPU
AUT[o]	12-MHz CPU (See note)

NOTE: CPU speed is reduced to 8 MHz during diskette access.

Two beeps at power-on indicate that the computer is operating at the AUTO operating speed, and one beep indicates that it is operating at the FAST operating speed.

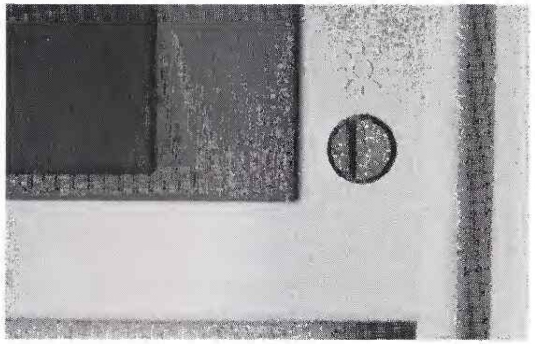


Figure 2-14. Brightness Control Knob.

2.12 ADJUSTING THE COMPAQ DUAL-MODE PLASMA DISPLAY BRIGHTNESS

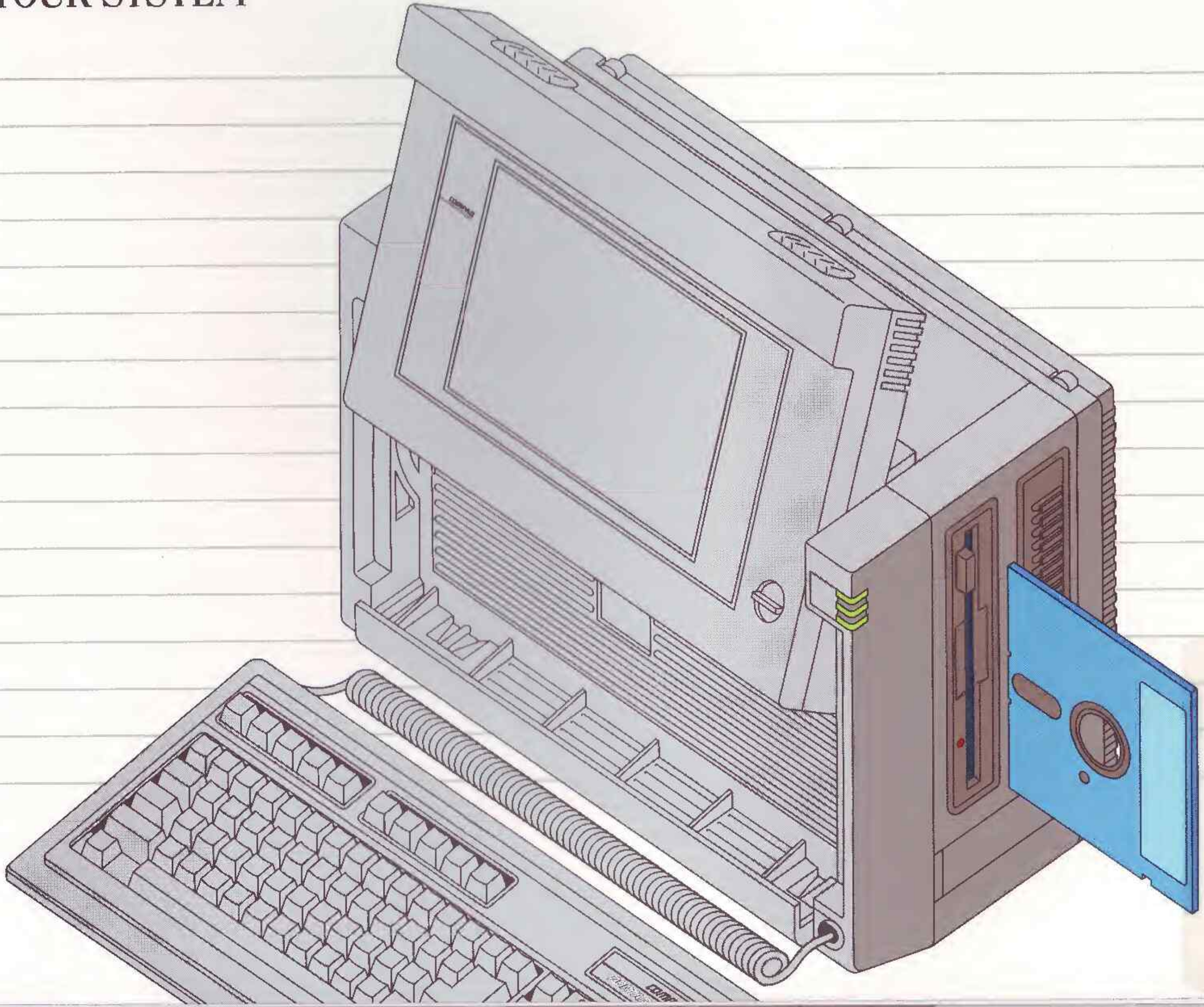
To adjust the brightness on the plasma display, use the brightness control knob located at the lower-right corner of the plasma display (Figure 2-14).

Turn the knob counterclockwise to dim the display or clockwise to brighten the display.

2.13 PREPARING YOUR SYSTEM FOR USE

If your Authorized COMPAQ Computer Dealer has not already done so, you will need to initialize your system before you can use the COMPAQ PORTABLE III Personal Computer. Instructions for this procedure are described in *Chapter 3,* INITIALIZING YOUR SYSTEM.

Chapter 3
INITIALIZING YOUR SYSTEM



Chapter 4
MOVING YOUR COMPUTER

Chapter 5
MULTIPLE KEYSTROKES

COMPAQ DUAL-MODE
PLASMA DISPLAY

Chapter 3
INITIALIZING YOUR SYSTEM

CONTENTS

Chapter 3

INITIALIZING YOUR SYSTEM

3.1 INTRODUCTION 3-1
3.2 REVIEWING YOUR DISKETTES 3-1
  USER DIAGNOSTICS Diskette 3-1
  USER PROGRAMS Diskette 3-2
3.3 INITIALIZATION PROCEDURES 3-5
3.4 RUNNING SETUP 3-6
3.5 RUNNING THE DIAGNOSTIC TESTS 3-7
3.6 DIAGNOSTICS MAIN MENU 3-8
  Format a Diskette (Diagnostics Only) 3-8
  Copy a Diskette (Diagnostics Only) 3-8
  Display ROM Versions 3-8
  Installed Device List 3-8
3.7 INITIALIZING YOUR FIXED DISK (DISKINIT) 3-9
3.8 COPYING THE USER PROGRAMS DISKETTE 3-10
3.9 COPYING SETUP TO YOUR FIXED DISK 3-10
3.10 COPYING DISKETTES 3-10

Chapter 3
INITIALIZING YOUR SYSTEM

3.1 INTRODUCTION

If your Authorized COMPAQ® Computer Dealer has not already done so, you will need to run the SETUP program to initialize your system before using the COMPAQ PORTABLE III™ Personal Computer. The SETUP program sets the system configuration and the real-time clock. You may also want to run the optional TEST program to determine that all the components of the computer are functioning properly. Additionally, you will need to partition and initialize the fixed disk to prepare it to store data.

This chapter contains a list and description of each diskette and what programs are on them. It also contains reference material about the SETUP and optional TEST programs, initializing your fixed disk, and copying diskettes. Use these sections as appropriate.

3.2 REVIEWING YOUR DISKETTES

Two diskettes are included with the COMPAQ PORTABLE III Personal Computer to assist you in initializing, testing, and configuring your system. They are the USER DIAGNOSTICS diskette and the USER PROGRAMS diskette. Both are self-booting and contain information screens about the programs and utilities provided on each diskette.

USER DIAGNOSTICS Diskette

The USER DIAGNOSTICS diskette contains programs used to configure and test the system. These programs are listed and explained below.

ROMREV.COM

ROMREV is used to easily display information on the current version level of ROMs in your system. This information is sometimes needed when adding options.

SETUP.EXE

SETUP is used to store information about your machine configuration in a memory device and set the real-time clock/calendar.

TEST.COM

TEST is used to determine if all the system components of the computer are functioning properly.

USER PROGRAMS Diskette

The USER PROGRAMS diskette contains programs to support COMPAQ specific features. Some of these programs are also located on the COMPAQ MS-DOS diskette. It is important to always use the latest versions of these programs to make use of the latest enhancements of these programs.

ADAPT.COM

The Advanced Display Attribute Programming Tool (ADAPT) is used to change the appearance of the characters on the COMPAQ Dual-Mode Plasma Display without exiting your application program.

It also allows you to change the time interval used by the screen-save feature; a feature developed for user privacy. When a specified amount of time has elapsed without an entry from the keyboard, screen-save will blank the screen. Pressing any key reactivates the screen. Pressing the SHIFT key reactivates it without any other action being taken by the computer (i.e. if you press an X, the X will appear on the screen).

Because ADAPT does not require you to exit the application program, you can easily see the effect of an ADAPT enhanced feature and determine which one you like best. ADAPT can modify the appearance of highlighted and nonhighlighted text to appear as:

Underlining
Reverse video
Half intensity
An alternate character set

Refer to *Section 5.9,* USING ADAPT, or the ***SUPPLEMENTAL SOFTWARE GUIDE*** for more ADAPT information.

CACHE.EXE

COMPAQ Disk Cache is used to enhance the performance of your fixed disk drive read operations when used with application programs, such as data bases, that are disk-read intensive. It improves access time to disk files by keeping copies of the most recently accessed data, and the data expected to be accessed, in memory.

CHARSET.COM

CHARSET is a program that allows you to load different character sets for use by the COMPAQ Dual-Mode Plasma Display. It may also be used to load character sets for the optional COMPAQ Enhanced Color Graphics Board.

CLOCK.SYS

CLOCK is an installable device driver and is recommended to ensure proper operation of the real-time clock/calendar.

GRAPHICS.COM

GRAPHICS allows you to use the PRTSC function to print a graphics display on a compatible graphics printer. You need to enter this command once after you turn on the printer; thereafter, you can activate it by pressing the SHIFT + PRTSC keys.

INSTALL

INSTALL is used as an installation aid for VDISK, and disk CACHE for MS-DOS.

MODE.COM

MODE is a multipurpose program that enables you to change the way you use several features of your system. Several MODE options are dependent on the hardware configuration of your system and may not apply to your particular computer.

Refer to your *MS-DOS VERSION 3 REFERENCE GUIDE* for complete information about the MODE command. For more information about the specific MODE commands that apply to the COMPAQ PORTABLE III Personal Computer, refer to *Chapter 5,* COMPAQ DUAL-MODE PLASMA DISPLAY, and the *SUPPLEMENTAL SOFTWARE GUIDE* supplied with the computer.

VDISK.SYS

VDISK (virtual disk) makes it possible to use a portion of the computer's memory to simulate a fixed disk drive. Any information that is written to a VDISK must be saved to the disk before turning the system off or rebooting; otherwise, it will be lost. These disks are virtual disks and are much faster than mechanical disk drives because they operate at the memory speed of the computer. To add VDISK to your system, run INSTALL.

For more information about the programs contained on the USER PROGRAMS diskette, refer to the *SUPPLEMENTAL SOFTWARE GUIDE*.

3.3 INITIALIZATION PROCEDURES

To initialize your system, perform the following steps:

1. Run SETUP to configure your system (USER DIAGNOSTICS).
2. Run TEST. This is an optional step to determine proper operation of your system components (USER DIAGNOSTICS).
3. Run DISKINIT to initialize your fixed disk drive (MS-DOS).
4. Copy or update your system with the programs on the USER PROGRAMS diskette.
5. Copy SETUP to your system for use when changing your unit configuration (USER DIAGNOSTICS).

3.4 RUNNING SETUP

The COMPAQ PORTABLE III Personal Computer uses a memory device that stores the current date, time, and system configuration. The SETUP program, included on your USER DIAGNOSTICS diskette, allows you to enter this information into the memory device.

You need to run SETUP under the following conditions:

- ☐ When your COMPAQ PORTABLE III Personal Computer is used for the first time.
- ☐ When the system configuration is changed (such as added memory).
- ☐ When certain options are added to your system. The documentation that is packed with your option kit instructs you when it is necessary to run this program.
- ☐ If the system board or battery is disconnected or replaced for any reason.
- ☐ If a system configuration error is detected during the Power-On Self-Test. In this situation, the system prompts you to run SETUP so that you can enter the correct information before continuing.

To run SETUP, follow these instructions:

1. Insert the USER DIAGNOSTICS diskette you received with this operations guide into Drive A and press in on the diskette drive button.
2. Turn on the computer, or reset the system by pressing and holding the **CTRL** and **ALT** keys and then pressing the **DEL** key.
3. At the A> prompt, type:

   ```
   SETUP
   ```

   and press the **ENTER** key.

The SETUP program sets the system configuration, prompting you for information as necessary.

3.5 RUNNING THE DIAGNOSTIC TESTS

The diagnostic tests determine whether all the components of the COMPAQ PORTABLE III Personal Computer are functioning properly. These tests are not user-selectable. All components of the system are tested in an order that enables the best system checkout.

To run the TEST program, follow this procedure:

1. If you have just completed the SETUP program, skip Steps 2 and 3 of this procedure.
2. Insert the USER DIAGNOSTICS diskette you received with this operations guide into Drive A and press in on the diskette drive button.
3. Turn on the computer, or reset the system by pressing and holding the **CTRL** and **ALT** keys and then pressing the **DEL** key.
4. At the A> prompt, type:

   ```
   TEST
   ```

   and press the **ENTER** key.
5. Select the RUN THE DIAGNOSTIC TESTS option.

   NOTE: Running TEST will sequentially run all the diagnostic tests.

3.6 DIAGNOSTICS MAIN MENU

The DIAGNOSTICS main menu allows you to run the diagnostic tests, format or copy a diskette, run the SETUP program, display ROM version information, or return to the operating system. A description of some of these selections follows.

Format a Diskette (Diagnostics Only)

To effectively test your diskette drives, format a diskette using the TEST program format selection before running the tests. This diskette should be formatted to match the capacity of the drive being tested. This selection allows you to format a diskette for use with diagnostics. To reuse this diskette with MS-DOS, it must be reformatted using the MS-DOS FORMAT command.

Copy a Diskette (Diagnostics Only)

This selection allows you to make a copy of your USER DIAGNOSTICS diskette. Copy the entire contents of this diskette onto another diskette and place your original USER DIAGNOSTICS diskette in a safe place. Use your copy for testing.

Display ROM Versions

This selection displays information about the current version level of ROMs in your system.

Installed Device List

If you run the diagnostic tests, the program displays a list of devices installed on your computer. You are asked to verify that the program has correctly detected these devices.

3.7 INITIALIZING YOUR FIXED DISK (DISKINIT)

You must initialize your fixed disk before it can be used to store information. DISKINIT, an MS-DOS utility, assists you in setting up an MS-DOS system with a fixed disk drive. Using DISKINIT saves time and effort by performing the initialization procedure automatically.

DISKINIT performs the following procedures for your fixed disk drive:

☐ Creates a copy of your MS-DOS diskette.

☐ Partitions and formats your fixed disk drive.

☐ Creates a directory for your MS-DOS files.

☐ Creates a CONFIG.SYS file and AUTOEXEC.BAT file from the root directory of the fixed disk.

☐ Copies the keyboard driver you have selected to the directory if you have selected a driver other than the U.S. English keyboard.

☐ Configures your system for the country code of your selection to display time and date in the format of that country.

☐ Configures your system for the standard keyboard layout for the country of your choice.

DISKINIT offers partition selections based on the size of the fixed disk installed in your system. The smallest partition provided by DISKINIT is 10 megabytes. The largest partition is 32 megabytes. DISKINIT uses COMPAQ ENHDISK.SYS to make it possible for you to access multiple MS-DOS partitions on your fixed disk and address them as logical drives. Refer to the ***MS-DOS VERSION 3 REFERENCE GUIDE*** for more information about DISKINIT and ENHDISK.

3.8 COPYING THE USER PROGRAMS DISKETTE

Update your system with programs on the USER PROGRAMS diskette. This will ensure that CHARSET and ADAPT are available for use and that you are using the latest version of all USER PROGRAMS. Some USER PROGRAMS are also contained in your COMPAQ MS-DOS diskette and may not be as recent as versions on the USER PROGRAMS diskette. Check and compare program dates to ensure that you are using the latest version.

3.9 COPYING SETUP TO YOUR FIXED DISK

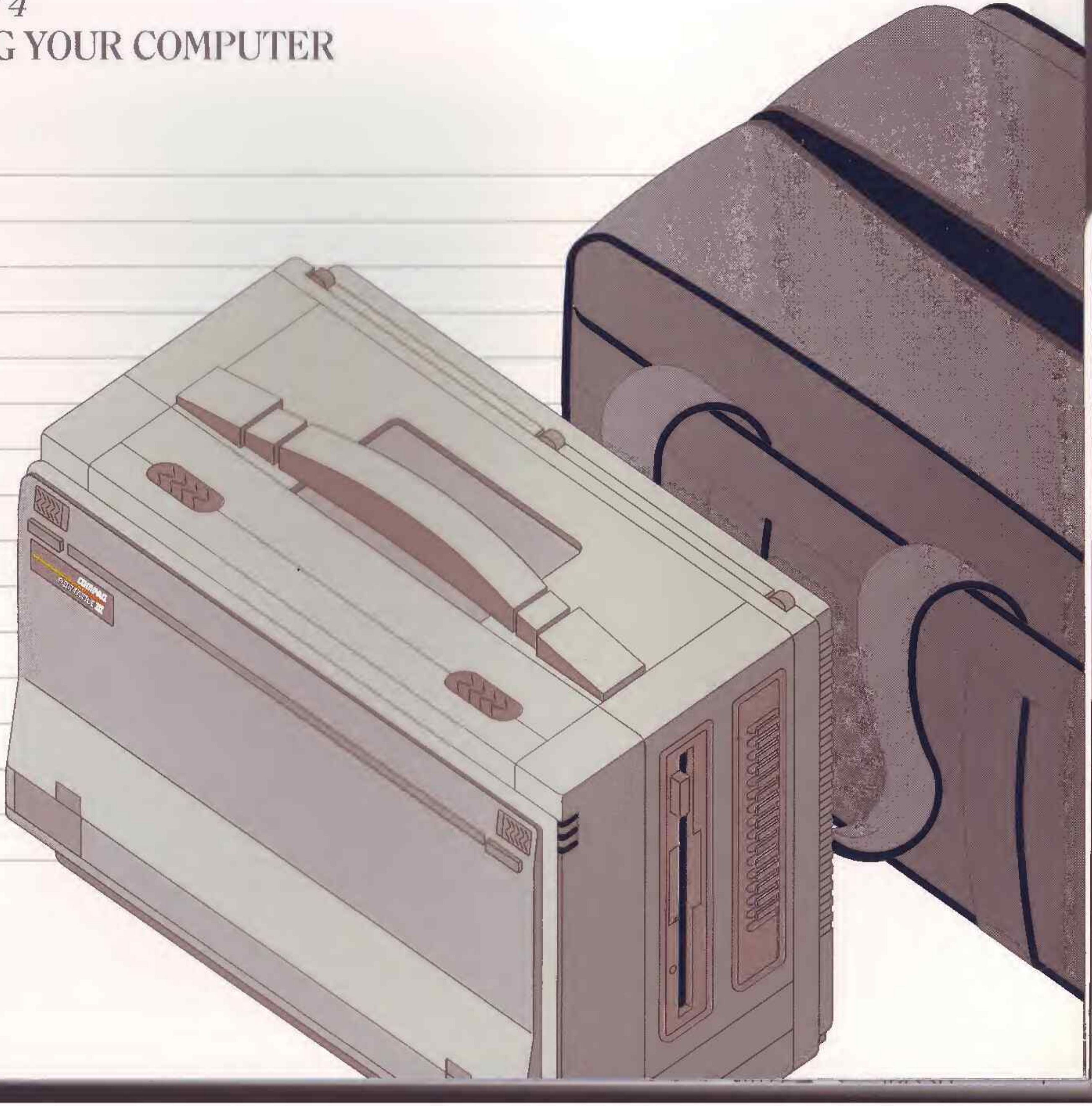
Copy SETUP.EXE from the USER DIAGNOSTICS diskette onto your fixed disk. This will permit quick and easy system configuration update when adding or removing system options.

3.10 COPYING DISKETTES

Before using your COMPAQ PORTABLE III Personal Computer, make a copy of each diskette provided with your system and store the originals in a safe place.

The USER DIAGNOSTICS and USER PROGRAMS diskettes contain additional programs that you will want to run at another time. Use the copies you have made of these diskettes to run these programs so that if the diskettes are ever damaged, the original diskettes are available for making more copies.

Chapter 4
MOVING YOUR COMPUTER



Chapter 4
MOVING YOUR COMPUTER

Chapter 5
MULTIPLE KEYSTROKES

Chapter 6
COMPAQ DUAL-MODE
PLASMA DISPLAY

SYSTEM BOARD SWITCH
AND JUMPERS

CONTENTS

Chapter 4
MOVING YOUR COMPUTER

4.1 INTRODUCTION 4-1
4.2 MOVING YOUR COMPUTER 4-1
  Saving Your Files 4-1
  Turning Off the Computer 4-1
  Replacing the Diskette 4-1
  Disconnecting the AC Power Cord and Peripheral Devices 4-1
  Lowering the COMPAQ Dual-Mode Plasma Display 4-2
  Securing the Keyboard 4-2
4.3 TRAVELING INTERNATIONALLY WITH YOUR COMPUTER 4-4

Chapter 4
MOVING YOUR COMPUTER

4.1 INTRODUCTION

This chapter provides instructions for you to follow when preparing to move your COMPAQ PORTABLE III™ Personal Computer from one location to another.

4.2 MOVING YOUR COMPUTER

Use the following information when preparing to move your computer.

Saving Your Files

Since data in RAM is lost when the computer is turned off, be sure to save your files before turning off the computer. Each application program has its own procedures for saving files.

Turning Off the Computer

Press the bottom of the ON/OFF switch labeled 0 to turn off the computer.

Replacing the Diskette

Remove your applications diskette from the diskette drive and replace it with a blank diskette.

Disconnecting the AC Power Cord and Peripheral Devices

Unplug the AC power cord first from the AC outlet and then from the computer power connection. Store the AC power cord in a safe place, such as the carrying case, if you have purchased that option.

Disconnect all peripheral devices attached to the computer. You do not need to remove the optional expansion unit.

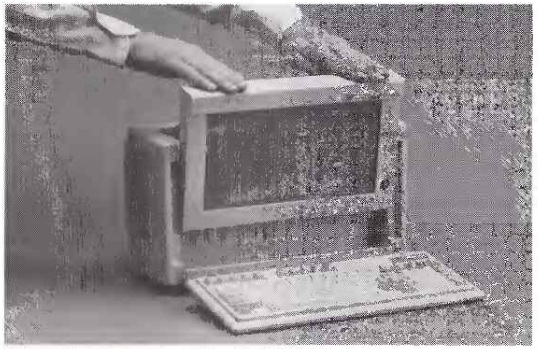


Figure 4-1. Lowering the COMPAQ Dual-Mode Plasma Display.

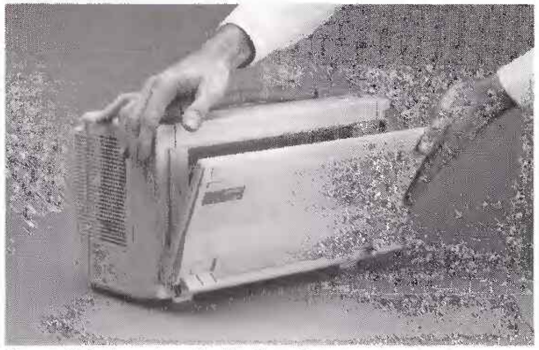


Figure 4-2. Securing the Keyboard.

Lowering the COMPAQ Dual-Mode Plasma Display

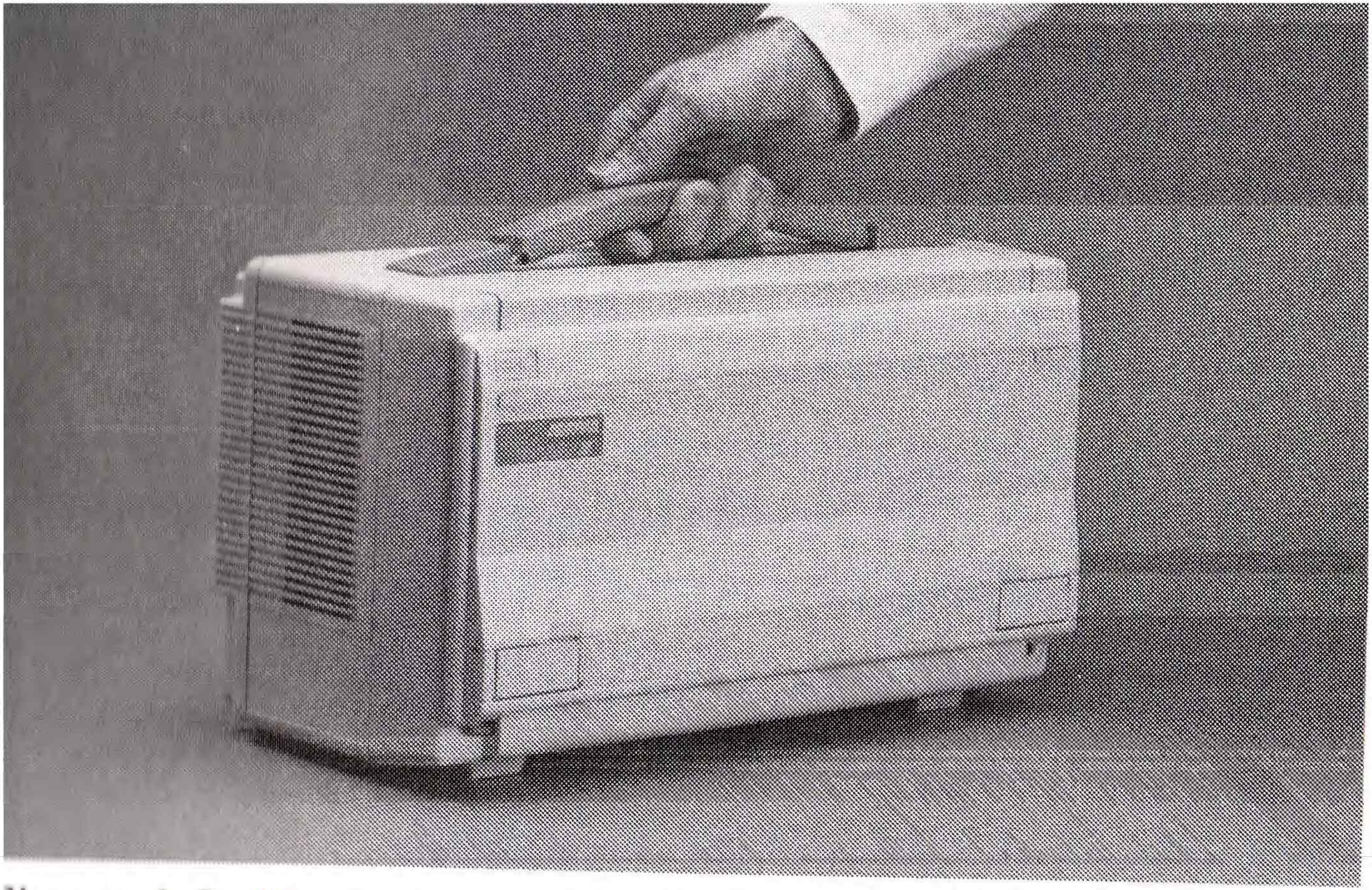
Pull the plasma display forward. With your hands on the top of the plasma display, press downward until it lowers into the locked position. Be sure that the latches on each side of the plasma display have engaged (Figure 4-1).

Securing the Keyboard

Lay the coiled keyboard cord in the cable storage tray in the front of the plasma display panel.

Place the keyboard in front of the plasma display and slide the keyboard latches outward to the locked position (Figure 4-2).

If the hinged feet on the bottom of the keyboard are open, fold them inward.



igure 4-3. Moving your COMPAQ PORTABLE III
ersonal Computer.

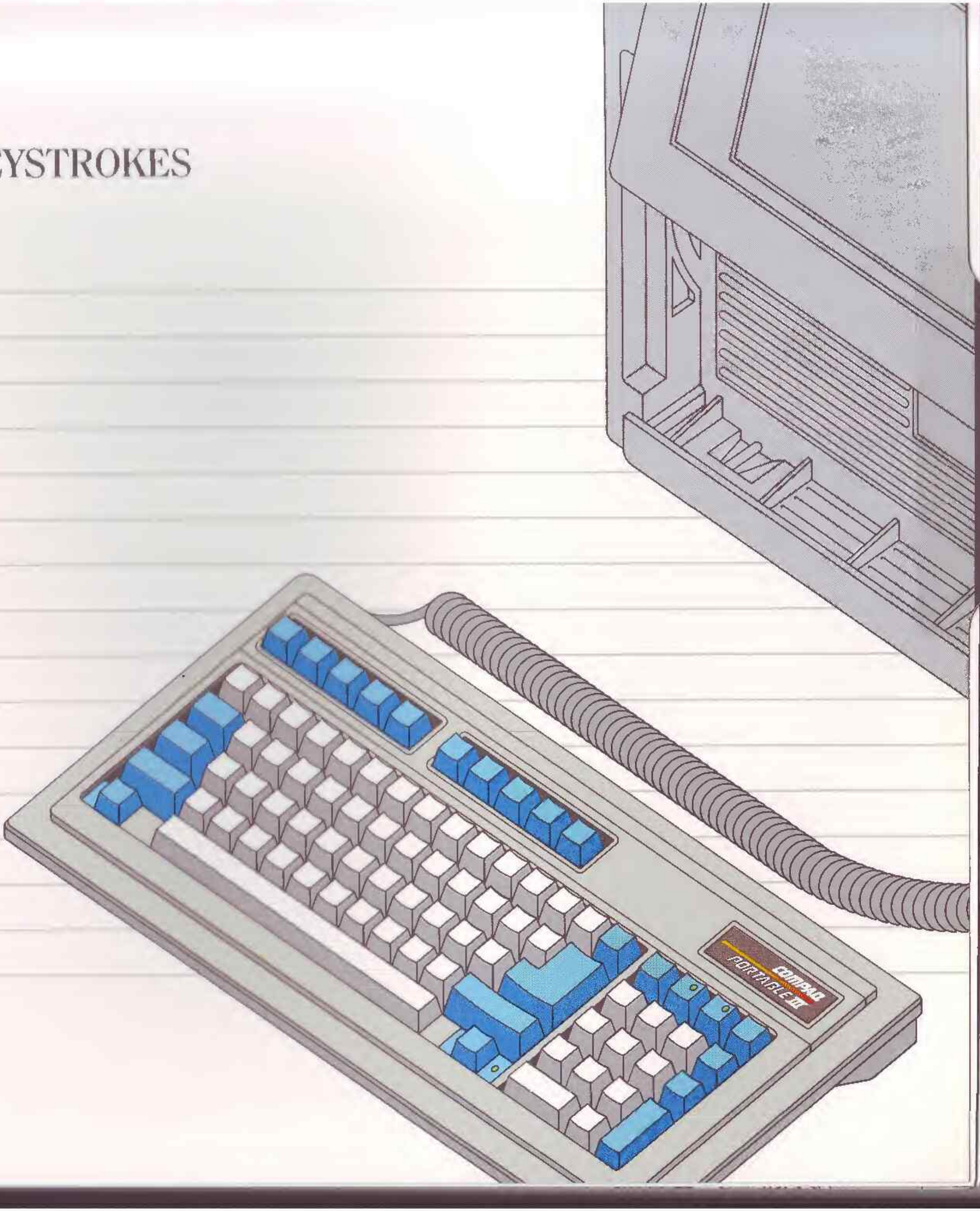
4.3 TRAVELING INTERNATIONALLY WITH YOUR COMPUTER

The automatic line selecting feature (standard on all COMPAQ PORTABLE III Personal Computer models), allows the COMPAQ PORTABLE III Personal Computer to be used in any country in the world without changing the configuration of the machine. You must, however, purchase a suitable AC power cord from an Authorized COMPAQ Computer Dealer in the country where you are taking the computer.

DO NOT use converter kits sold for hair dryers, electric razors, etc. to power your computer, as they have not been tested for safety and reliability by Compaq Computer Corporation.

The COMPAQ PORTABLE III Personal Computer operates at any voltage ranging from 102 VAC to 132 VAC; and at a line frequency of 60 Hz.

Chapter 5
MULTIPLE KEYSTROKES


COMPAQ
PORTABLE III

OPTIONS

Chapter 5
MULTIPLE KEYSTROKES

Chapter 6
COMPAQ DUAL-MODE PLASMA DISPLAY

SYSTEM BOARD SWITCH AND JUMPERS

CONTENTS

Chapter 5

MULTIPLE KEYSTROKES

5.1 INTRODUCTION 5-1
5.2 MULTIPLE KEY FUNCTIONS 5-1

Chapter 5
MULTIPLE KEYSTROKES

5.1 INTRODUCTION

In addition to using your keyboard to enter information, you can use it to perform other functions, such as stopping an operation or stopping and restarting scrolling. These functions are referred to as multiple key functions because they are invoked by pressing two or more keys simultaneously.

These multiple key functions can be disabled by the specific application program in use. When using an application program, refer to its manual for specific information about any multiple key functions it uses.

5.2 MULTIPLE KEY FUNCTIONS

Table 5-1 lists the multiple key functions that are frequently used during operations on the COMPAQ PORTABLE III™ Personal Computer.

Table 5-1. Multiple Key Functions

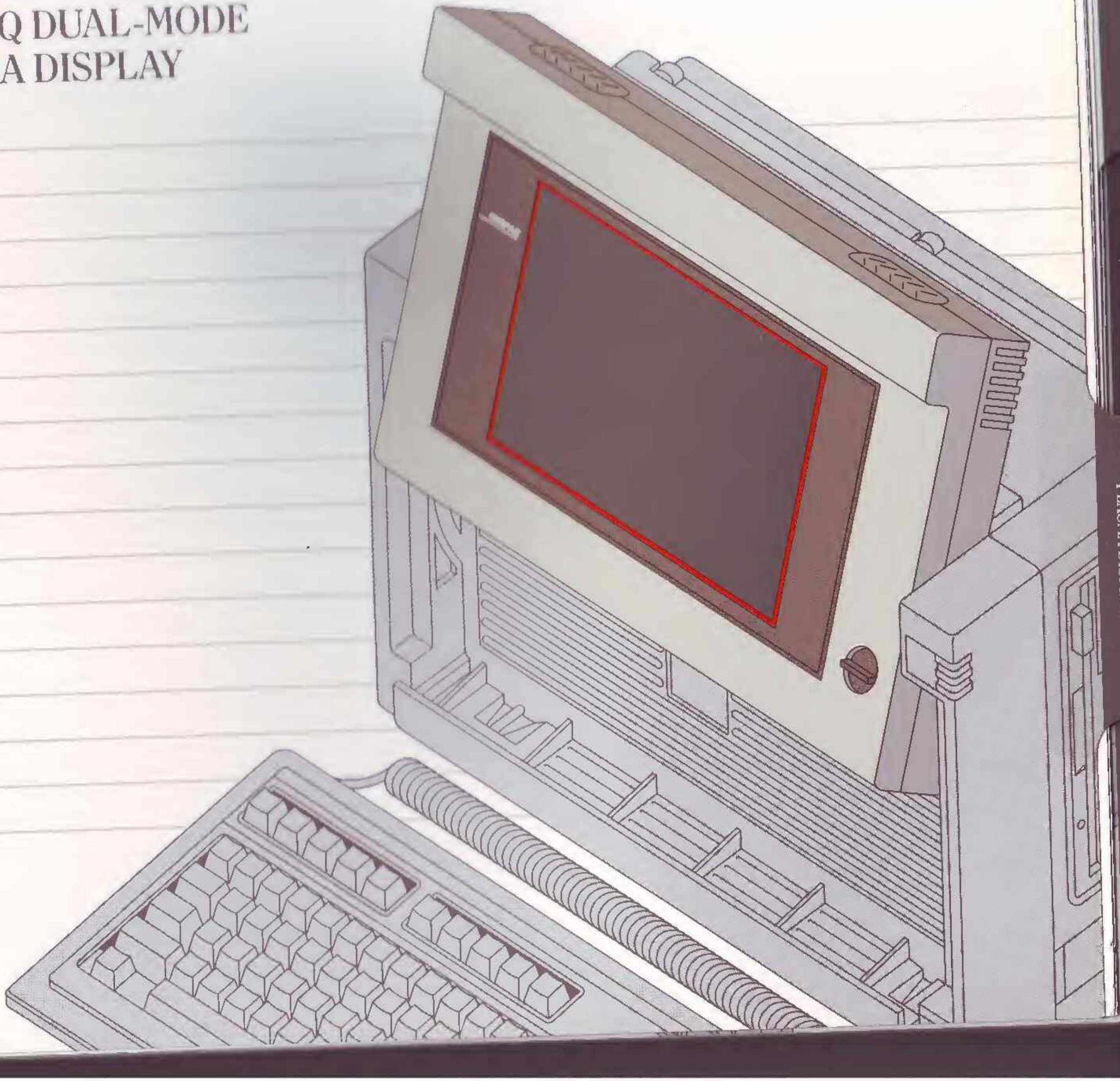
Function	Action
System Reset	Press and hold the **CTRL** and **ALT** keys and then press the **DEL** key.
Increase Keyclick Volume	Press and hold the **CTRL** and **ALT** keys and then press the **+ (PLUS)** key (from the numeric keypad) until you reach the desired volume.
Decrease Keyclick Volume	Press and hold the **CTRL** and **ALT** keys and then press the **– (MINUS)** key (from the numeric keypad) until you reach the desired volume.

Continued

Table 5-1. Multiple Key Functions: *Continued*

Function	Action
Terminate (Abort) an Operation	Press and hold the **CTRL** key and then press the **BREAK** key.
Halt Action Temporarily (Pause)	Press and hold the **CTRL** key while pressing the **NUM LOCK** key.
Resume Action (After a Pause)	Press any key.
Print Data (Echo Text) from Screen (Line by Line)	Press and hold the **CTRL** key and then press the **PRTSC (PRINT SCREEN)** key. Thereafter, each time you type data and press the **ENTER** key, the printer echoes what you typed. This multiple keystroke is a toggle. Pressing and holding the **CTRL** key and then pressing the **PRTSC (PRINT SCREEN)** a second time turns the function off.
Print Data from the Screen	Press the **PRTSC (PRINT SCREEN)** key.
Change CPU Speed	Press and hold the **CTRL** and **ALT** keys and then press the \ **(BACKSLASH)** key. Pressing these keys causes the CPU speed to toggle between 12 MHz and 8 MHz. The computer sounds two beeps to indicate that it is operating at 12 MHz (HIGH speed or AUTO speed), and one beep to indicate that it is operating at 8 MHz (FAST speed). **NOTE:** If you are using a keyboard other than a U.S. English keyboard, substitute the key to the left of the **BACKSPACE** key for the \ **(BACKSLASH)** key.
External Monitor Selection	Press and hold the **CTRL** and **ALT** keys and then press the < **(LESS THAN)** key.
Dual-Mode Plasma Display Selection	Press and hold the **CTRL** and **ALT** keys and then press the > **(GREATER THAN)** key to return to the plasma display after using an external monitor.

Chapter 6
COMPAQ DUAL-MODE PLASMA DISPLAY



CONTENTS

Chapter 6

COMPAQ DUAL-MODE PLASMA DISPLAY

6.1 INTRODUCTION 6-1

6.2 FEATURES OF THE COMPAQ DUAL-MODE PLASMA DISPLAY 6-1

6.3 TEXT CHARACTERISTICS 6-3

6.4 SETTING UP YOUR DISPLAY PARAMETERS 6-4

6.5 USING SETUP TO SET HIGHLIGHTED TEXT 6-4

6.6 USING THE MODE COMMAND TO SET HIGHLIGHTED TEXT 6-5

6.7 ADDITIONAL MODE COMMAND FEATURES 6-5

  MODE SCREEN-SAVE 6-5

  MODE SELECT 6-6

  MODE UNDERLINE 6-7

6.8 USING CHARSET 6-8

6.9 USING ADAPT 6-9

Chapter 6
COMPAQ DUAL-MODE PLASMA DISPLAY

6.1 INTRODUCTION

This chapter describes the features of the COMPAQ Dual-Mode Plasma Display and the software enhancements that have been written to fully utilize its capabilities (Figure 6-1). Complete information on the use of these programs is provided in the ***SUPPLEMENTAL SOFTWARE GUIDE***.

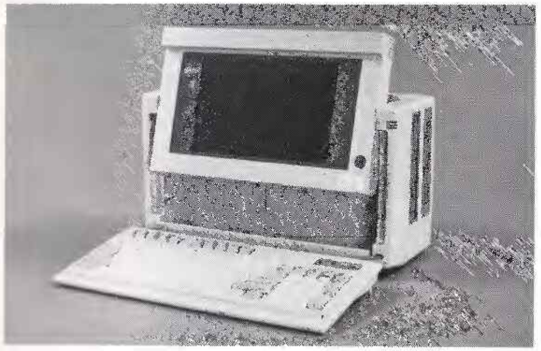


Figure 6-1. COMPAQ Dual-Mode Plasma Display.

6.2 FEATURES OF THE COMPAQ DUAL-MODE PLASMA DISPLAY

The plasma display is the primary output device for the COMPAQ PORTABLE III™ Personal Computer. Its innovative design provides clarity of image and compatibility with your existing software within a lightweight, flat panel. The plasma display system features:

☐ High-resolution text (640 × 400, 80 characters × 25 lines)

☐ Graphics in three resolutions (640 × 400, 320 × 200, and 640 × 200)

☐ 10-Inch diagonal nonglare display

☐ Adjustable viewing position

☐ Built-in screen-save feature

☐ Brightness control knob

☐ Support for an external color RGBI monitor

☐ User loadable character fonts (CHARSET)

☐ Advanced Display Attribute Programming Tool (ADAPT)

The plasma display can be used in multiple viewing positions. It operates in two vertical positions (locked and raised). In the raised position, it can be tilted to provide a range of viewing angles.

The COMPAQ Dual-Mode Plasma Display supports both color (CGA) and monochrome (MDA) modes. You will need to determine the appropriate mode for each software application you use, and issue the appropriate MODE SELECT command (See *Section 6.7,* ADDITIONAL MODE COMMAND FEATURES), before accessing the software.

The plasma display controller provides a high-resolution character font of well-defined, easily readable characters. In addition, CHARSET can be used to load custom fonts for special applications.

The screen-save feature automatically blanks the plasma display after a specified time interval without activity. This prevents private information from being readily viewed while unattended.

ADAPT is a memory-resident utility specifically designed for the COMPAQ Dual-Mode Plasma Display. It allows you to change the appearance of the video display from within your application program. It also allows you to change the time interval used by the screen-save feature.

6.3 TEXT CHARACTERISTICS

The COMPAQ PORTABLE III Personal Computer allows you to modify text characteristics of the plasma display using ADAPT. Many application programs provide highlighted text which appears brighter than surrounding text. On the plasma display, these characters are shown at a lower intensity than surrounding text. This is the default mode of the plasma display.

You can modify the way in which highlighted text is displayed by selecting a display option. These options are:

☐ Half-Intensity — Highlighted text appears dimmer than surrounding text (default setting).

☐ Reverse Video — Highlighted fields are shown in dark on a light background.

☐ Underline — Highlighted fields are underlined.

☐ Alternate Character Set — Highlighted fields are displayed in a different character font (CHARSET).

☐ None — Does not distinguish highlighted areas.

There is also an option called Toggle, which reverses the effect of the option previously selected. For example, if you select Underline and find that most of the characters are underlined, you can select the Toggle option. This reverses the option so that underlined text appears normal and normal text appears underlined. Refer to the ***SUPPLEMENTAL SOFTWARE GUIDE*** and *Section 6.9,* USING ADAPT, for more information about ADAPT.

6.4 SETTING UP YOUR DISPLAY PARAMETERS

You can customize the representation of highlighted text on your plasma display through any of the following:

- ☐ Using the SETUP program to set the default configuration
- ☐ Using the MODE command for less frequent changes
- ☐ Using the ADAPT program for use within an application

6.5 USING SETUP TO SET HIGHLIGHTED TEXT

The SETUP program, described in *Chapter 3,* **INITIALIZING YOUR SYSTEM**, allows you to set the default values for the plasma display. These values should be the ones that work best for most of your applications.

6.6 USING THE MODE COMMAND TO SET HIGHLIGHTED TEXT

The MODE command on the USER PROGRAMS diskette allows you to change the appearance of the highlighted text. These changes remain in effect until you reboot, turn off your computer, or execute the MODE ATT (Attribute) command again using different parameters (Table 6-1).

Table 6-1. MODE ATTRIBUTE Parameters

Parameter	Description
ALT(ernate)	Uses a different character font for highlighted text. This font must have been previously loaded with CHARSET. (See *Section 6.7*, **USING CHARSET**).
HAL(f)	Uses half-intensity for highlighted text.
REV(erse)	Uses reverse video for highlighted text.
UND(erline)	Uses underlining for highlighted text.
IGN(ore)	Disables highlighting.
TOG(gle)	Reverses highlighted and normal text.

6.7 ADDITIONAL MODE COMMAND FEATURES

The MODE command supplied on the USER PROGRAMS diskette also contains the following options for the plasma display.

MODE SCREEN-SAVE

This option allows you to set the length of time used by the screen-save feature anywhere from 0 to 63 minutes. The default is 15 minutes. This means that if 15 minutes elapse without an entry from the keyboard or other computer activity, the screen goes blank. Pressing any key reactivates the screen. Pressing the **SHIFT** key reactivates it without any action being taken on the computer (i.e. if you press an X, the X will appear on the screen).

MODE SELECT

This option allows you to set the mode in which the plasma display controller operates. If you have additional video controllers, see the instruction manual for that option. Table 6-2 shows the MODE SELECT parameters.

Table 6-2. MODE SELECT Parameters

Parameter	Description
CGA	This parameter puts the plasma display controller in the CGA emulation mode.
MDA	This parameter puts the plasma display controller in the MDA emulation mode.

CGA = Color Graphics Adapter
MDA = Monochrome Display Adapter

The MODE SELECT = CGA option allows your COMPAQ Dual-Mode Plasma Display to emulate a color graphics adapter. This is the mode used by COMPAQ external monitors that are connected to the standard RGBI interface. The CGA mode is the default when the system is turned on.

The MODE SELECT = MDA option allows your COMPAQ Dual-Mode Plasma Display to emulate a standard monochrome display adapter. Two situations require the use of the MDA mode. They are:

1. When you use the COMPAQ PORTABLE III with a color monitor and a COMPAQ Enhanced Color Graphics Board installed in the expansion unit; and
2. When you run a text-based application that uses an extensive amount of color text and does not have an installation option for either a black and white monitor or single color monitor connected to CGA.

NOTE: Most software installation procedures require that you specify the type of monitor used. Compaq Computer Corporation recommends that you specify a monochrome monitor for most text-based applications.

If you require both CGA and MDA modes at different times, you must remember to set your system for the required mode before running the application software. If you specify a monochrome display in your installation procedure, your system must be in MDA mode before the application can be accessed.

Once you have determined the correct MODE SELECT option for each software application, you may want to automate the selection process by including the appropriate MODE SELECT command in a batch file that starts the application. For more information on writing batch commands, refer to the ***MS-DOS VERSION 3 REFERENCE GUIDE***.

MODE UNDERLINE

This option allows application programs to display underlined text. Table 6-3 shows the MODE UNDERLINE parameters.

Table 6-3. MODE UNDERLINE Parameters

Parameter	Description
ON	Enables underlining
OFF	Disables underlining

6.8 USING CHARSET

CHARSET is an MS-DOS utility specifically designed for the COMPAQ Dual-Mode Plasma Display or the COMPAQ Enhanced Color Graphics Board. It loads all the character sets automatically when invoked, using the appropriate font for the monitor installed. The COMPAQ PORTABLE III Personal Computer has several character sets to support both the plasma display and an external monitor.

You may load a main character set or a main and an alternate character set.

To use CHARSET, the USER PROGRAMS diskette must have been copied onto your MS-DOS directory. Use the CHARSET command to select the character set desired. For example, to choose the alternate character set using the THINUS font, type:

```
CHARSET ALT=THINUS
```

The selection of the alternate character representation requires the use of the CHARSET utility. CHARSET loads two different character sets into the computer. One character set is used for normal characters, the second for alternate characters (characters in highlighted text). The CHARSET utility must be used each time the computer is turned on if the alternate character display option is used. CHARSET is usually executed in the AUTOEXEC.BAT file.

6.9 USING ADAPT

ADAPT is a memory-resident utility that allows you to change the appearance of the characters on the COMPAQ Dual-Mode Plasma Display without exiting your application program. It also allows you to change the time interval used by the screen-save feature. Highlighted text can be set for underlining, reverse video, half-intensity, and an alternate character set (CHARSET) by using ADAPT.

ADAPT allows the user to select any one of these display characteristics. Once the display characteristic is selected, the SETUP program from the USER DIAGNOSTICS diskette should be used to permanently change the default selection to the one selected using ADAPT. The default selection using SETUP is retained in the computer until it is changed permanently again by the SETUP program or changed temporarily by using ADAPT. This eliminates the need to install ADAPT and change the selection every time the computer is turned off. Changes made by ADAPT are in effect only until the power is turned off.

To load ADAPT, follows these instructions:

1. Copy the USER PROGRAMS diskette onto the fixed disk drive (if you have not already done so).
2. When the system prompt appears, type:

   ```
   ADAPT
   ```

   and press the **ENTER** key.

To use ADAPT, activate it by pressing the CTRL and left SHIFT keys. The ADAPT Main Menu appears to guide you through the program. Make a selection from this menu by using the cursor control keys to put your selection in reverse video and pressing the ENTER key.

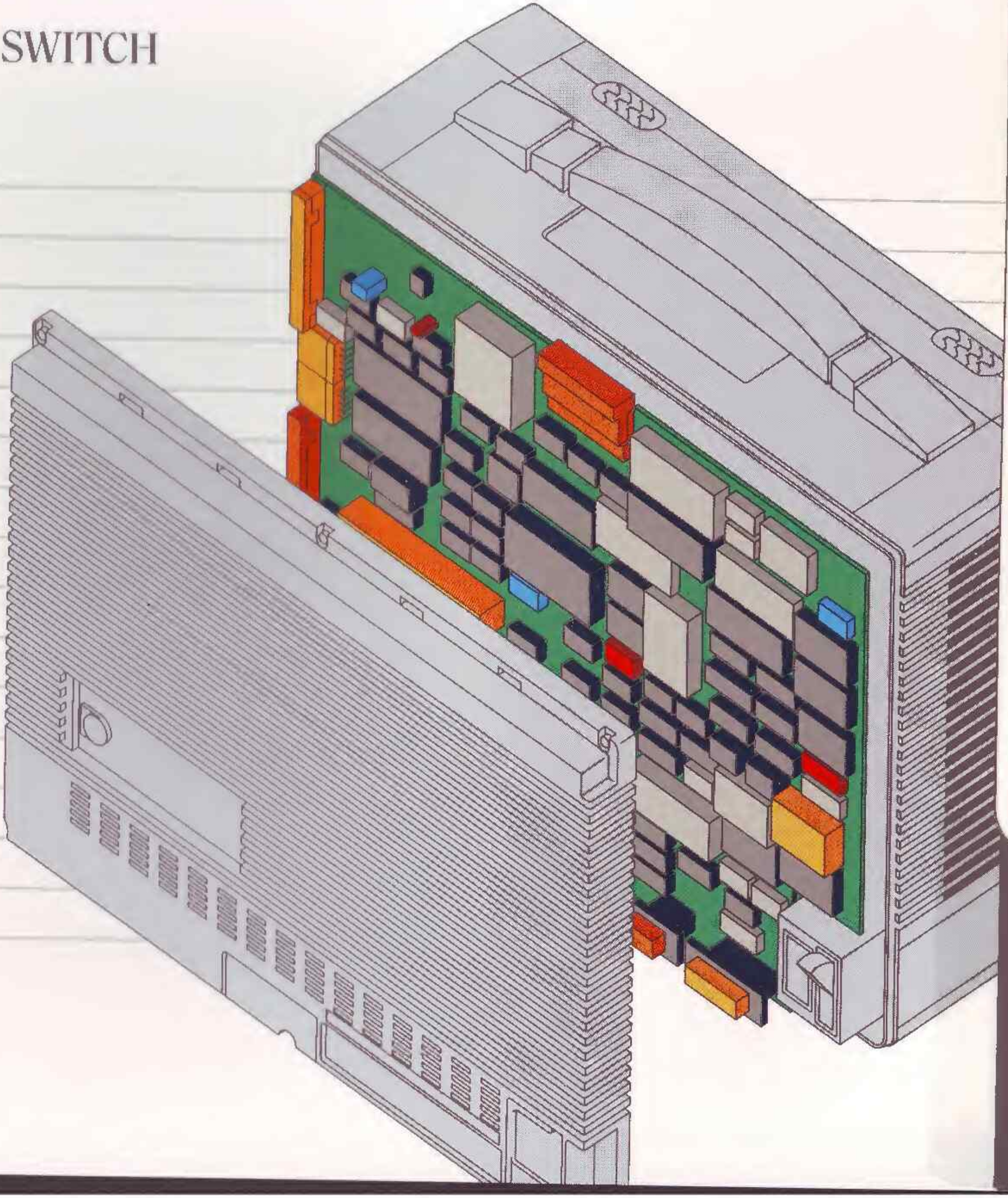
The keys to activate ADAPT can be reconfigured if there is a conflict of activation keys between ADAPT and other memory-resident programs. To change the activation key sequence of ADAPT, at the A> prompt, type:

```
ADAPT/C
```

and press the **ENTER** key.

For more information on how ADAPT operates, refer to your SUPPLEMENTAL SOFTWARE GUIDE and Appendix C of this guide.

Chapter 7
SYSTEM BOARD SWITCH AND JUMPERS



CONTENTS

Chapter 7

SYSTEM BOARD SWITCH AND JUMPERS

7.1 INTRODUCTION 7-1

7.2 ACCESSING THE SYSTEM BOARD 7-1

- Preparation 7-1
- Removing the Rear Panel 7-2

7.3 SETTING THE SYSTEM BOARD SWITCH 7-3

7.4 SETTING THE JUMPERS 7-4

7.5 REPLACING THE REAR PANEL 7-4

Chapter 7

SYSTEM BOARD SWITCH AND JUMPERS

7.1 INTRODUCTION

The system board in the COMPAQ PORTABLE III™ Personal Computer contains jumpers and an eight-position switch that you can set to configure the system for your needs. By changing these switch and jumper settings, you can:

☐ Configure the system to indicate a specific amount of base memory less than the standard 640 Kbytes.

☐ Configure the system to include the memory added by the memory modules on the memory expansion board.

☐ Configure the system to include a fixed disk drive.

☐ Set the CPU speed permanently at 8 MHz, thus disabling the multiple keystrokes and MODE commands that allow you to change the speed of the CPU.

☐ Change the default display.

☐ Change the modem from COM1 to COM2.

☐ Disable either COM1, COM2, or both asynchronous communications interfaces.

7.2 ACCESSING THE SYSTEM BOARD

The COMPAQ PORTABLE III Personal Computer system board is easily accessed. The only tools you need are Torx ® T-15 and T-10 screwdrivers.

Preparation

Before removing the rear panel of the computer, follow these instructions:

1. Turn off the computer.
2. Secure the keyboard as if preparing to transport your computer.
3. Disconnect any peripheral devices (printers, etc.) from the computer.
4. Disconnect the AC power cord from the AC outlet and the computer.

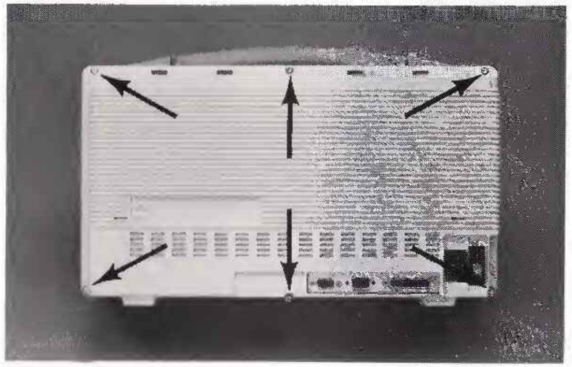


Figure 7-1. Location of Rear Panel Screws and Washers.

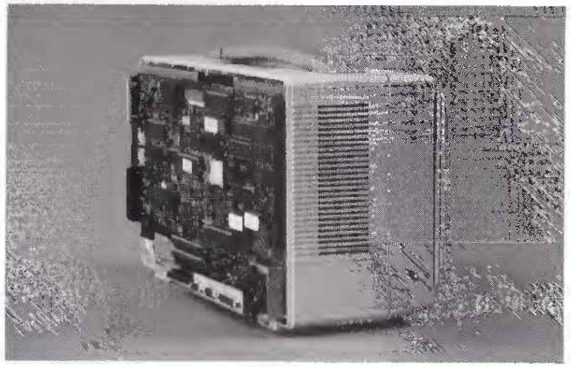


Figure 7-2. System Board.

Removing the Rear Panel

> **WARNING**
>
> **Before removing the rear panel, BE SURE that the ON/OFF switch is in the OFF (0) position, and that the AC power cord is disconnected.**

1. With the keyboard secured, place the computer keyboard side down on a level surface, such as a table or workbench, with the rear panel facing up and the handle facing away from you.
2. Remove the six screws and washers that hold the rear panel onto the computer (Figure 7-1).
3. Note that the two screws you removed from the center positions are shorter than the other four screws.
4. Put the screws and washers aside in a safe place while you set the system switches.
5. Carefully lift the rear panel away from the computer and set it aside.
6. The system board is now exposed (Figure 7-2).

7.3 SETTING THE SYSTEM BOARD SWITCH

There is an eight-position switch on the system board (Figure 7-3).

Refer to the configuration label on the inside of the rear panel of the computer for the location of the switch. To change the setting at any of the positions, use a pointed object, such as a pen, to toggle the switch into the desired setting.

NOTE: If you are using a modem (in the Expansion Unit), you must remove the two jumpers that can configure the COMPAQ internal modem to the same address.

Using the switch, you can:

- ☐ Configure your system to recognize a specific amount of base memory rather than a range, if this is required by your software.
- ☐ Configure your system to recognize the memory contained on the memory modules on the memory expansion boards.
- ☐ Configure your system to recognize the installation of a fixed disk drive.
- ☐ Set the CPU power-on to FAST or AUTO.
- ☐ Change the default display.

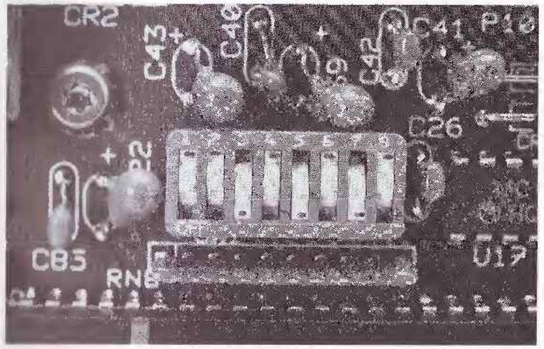


Figure 7-3.

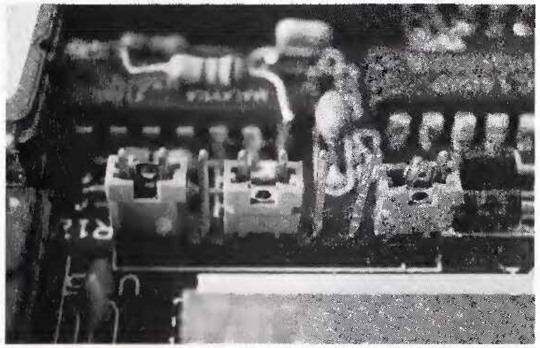


Figure 7-4. Jumpers.

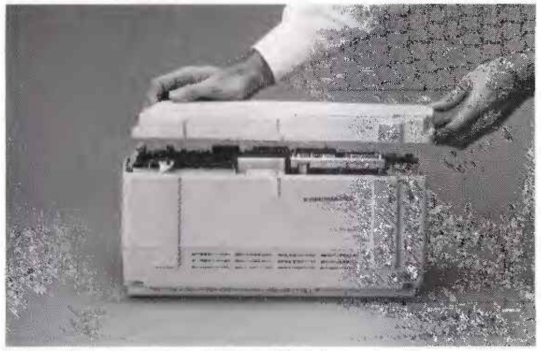


Figure 7-5. Replacing the Rear Panel.

7.4 SETTING THE JUMPERS

Figure 7-4 shows a bank of jumpers on the system board.

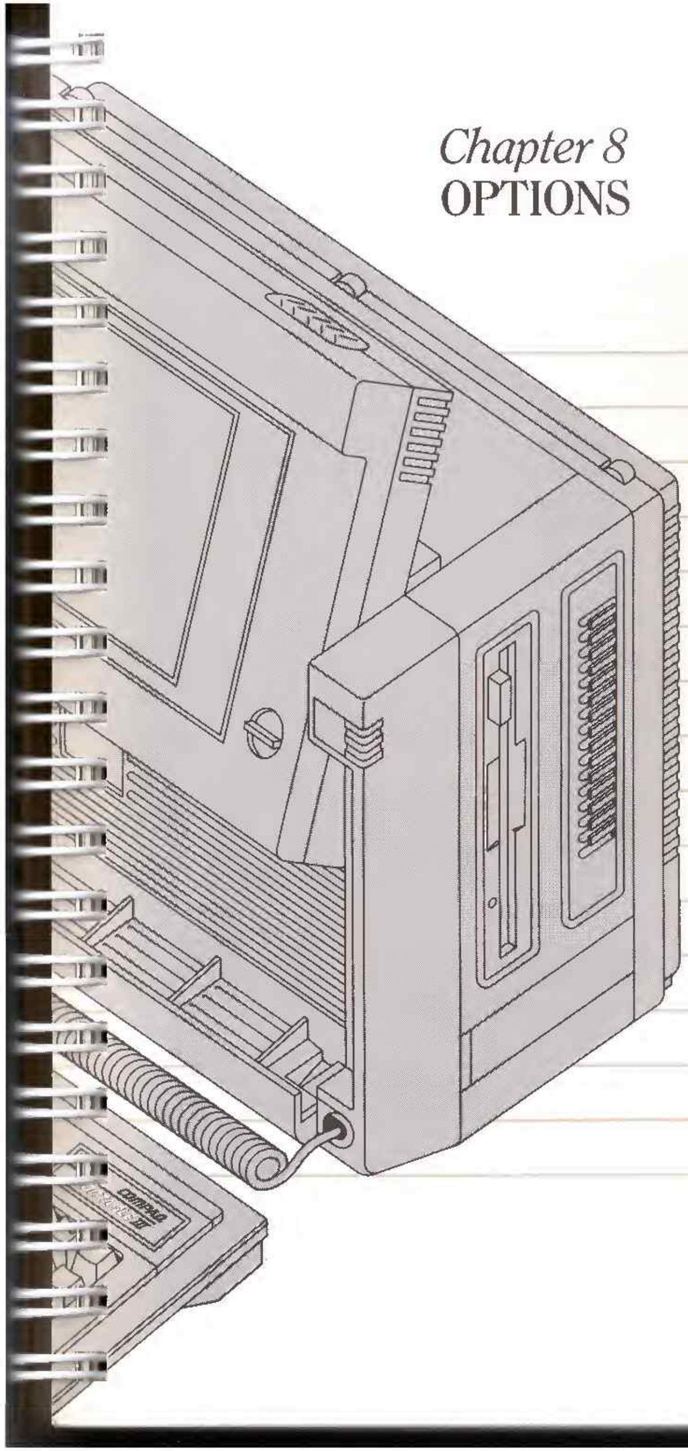
Refer to the configuration label on the inside rear of the computer for the locations and settings of the jumpers that change the default of COM2 by the modem to COM1 if this is required by your communications software.

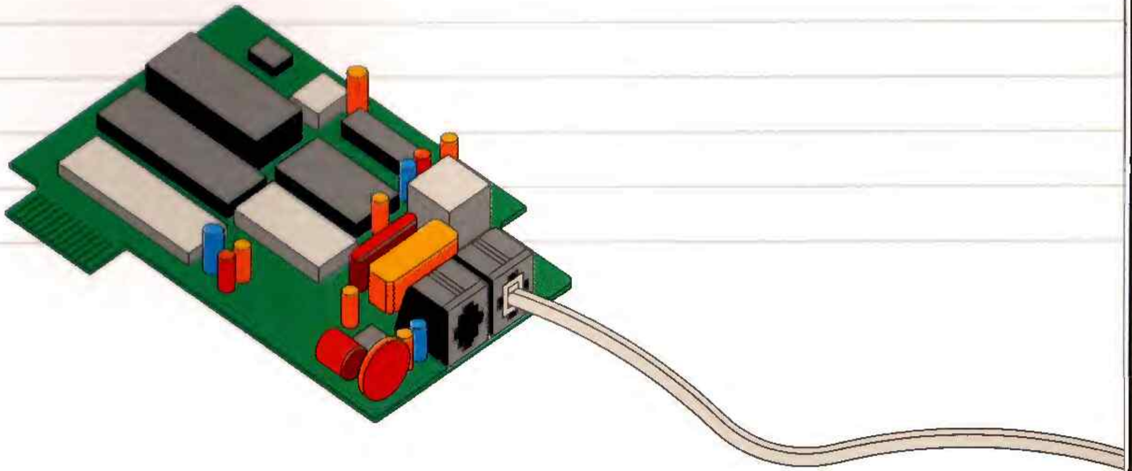
7.5 REPLACING THE REAR PANEL

Replace the rear panel by holding it in place on the back of the computer, and securing it in place with the retaining screws and washers that you removed earlier (Figure 7-5).

NOTE: The long screws are used for the four corners of the panel. The shorter screws are used for the top and bottom center positions.

Chapter 8
OPTIONS





CONTENTS

Chapter 8
OPTIONS

8.1 INTRODUCTION 8-1
8.2 OPTIONS 8-2
- 20-Megabyte Fixed Disk Drive 8-3
- 40-Megabyte Fixed Disk Drive 8-3
- 40-Megabyte Fixed Disk Drive Backup Expansion Unit 8-4
- DC-2000 Tape Cartridge 8-5
- 360-Kbyte Diskette Drive 8-5
- COMPAQ 1200 Baud Internal Modem 8-6
- COMPAQ 2400 Baud Internal Modem 8-6
- Expansion Unit 8-7
- 16-Bit Memory/Modem Interface Board 8-7
- 512-Kbyte Memory Option Kit 8-8
- 2-Megabyte Memory Option Kit 8-9
- Memory Expansion Board 8-10
- 8-MHz 80287 Coprocessor 8-10
- COMPAQ Color Monitor 8-11
- COMPAQ Enhanced Color Graphics Board 8-11
- Asynchronous Communications/Parallel Printer Board 8-12

Second Asynchronous Communications Interface Board 8-12
Desktop Pedestal 8-13
Carrying Case 8-13
MS-DOS/BASIC Version 3 8-14
COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE 8-14
COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE 8-15

Chapter 8
OPTIONS

8.1 INTRODUCTION

Several options are available to expand the capability of your COMPAQ PORTABLE III™ Personal Computer. When you purchase options that are supplied by Compaq Computer Corporation, installation booklets or information cards are packaged with the options.

For the most current selection of available options for use with your COMPAQ PORTABLE III Personal Computer, please see your Authorized COMPAQ® Computer Dealer.

8.2 OPTIONS

The following options are available for the COMPAQ PORTABLE III Personal Computer:

☐ 20-Megabyte Fixed Disk Drive

☐ 40-Megabyte Fixed Disk Drive

☐ 40-Megabyte Fixed Disk Drive Backup Expansion Unit

☐ DC-2000 Tape Cartridge

☐ 360-Kbyte Diskette Drive

☐ COMPAQ 1200-Baud Internal Modem

☐ COMPAQ 2400-Baud Internal Modem

☐ Expansion Unit

☐ 16-Bit Memory/Modem Interface Board

☐ 512-Kbyte Memory Option Kit

☐ 2-Megabyte Memory Option Kit

☐ Memory Expansion Board

☐ 8-MHz 80287 Coprocessor

☐ COMPAQ Color Monitor

☐ COMPAQ Enhanced Color Graphics Board

☐ Asynchronous Communications/Parallel Printer Board

☐ Second Asynchronous Communications Interface Board

☐ Desktop Pedestal

☐ Carrying Case in leather or nylon

☐ MS-DOS/BASIC Version 3

☐ *COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE*

☐ *COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE*

The following sections of this chapter describe these options.

20-Megabyte Fixed Disk Drive

The 20-Megabyte Fixed Disk Drive Option Kit consists of a 20-megabyte fixed disk drive, a power cable, a signal cable, a set of screws, a faceplate, and an installation guide (Figure 8-1).

40-Megabyte Fixed Disk Drive

The 40-Megabyte Fixed Disk Drive Option Kit consists of a 40-megabyte fixed disk drive, a power cable, a signal cable, a set of screws, a faceplate, and an installation guide (Figure 8-2).

This high-performance 3 1/2-inch, fixed disk drive can be installed in a COMPAQ PORTABLE III Personal Computer. The fixed disk drive controller is an integral part of the fixed disk drive.

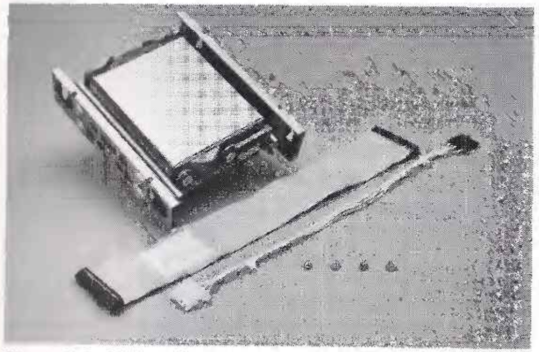


Figure 8-1. 20-Megabyte Fixed Disk Drive Option Kit.

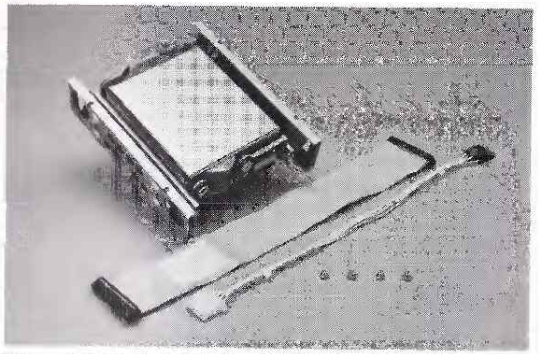


Figure 8-2. 40-Megabyte Fixed Disk Drive Option Kit.

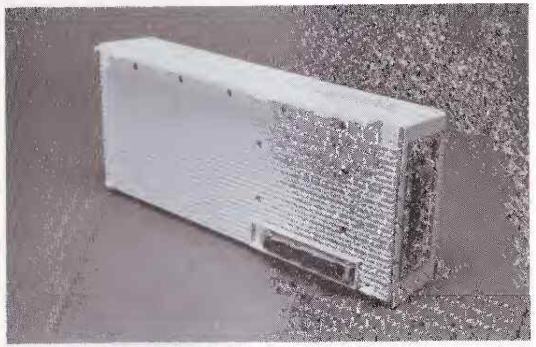


Figure 8-3. 40-Megabyte Fixed Disk Drive Backup Expansion Unit.

40-Megabyte Fixed Disk Drive Backup Expansion Unit

The 40-Megabyte Fixed Disk Drive Backup Expansion Unit provides a fast and easy way to back up the fixed disk drive. It attaches easily and can be removed so it does not have to be carried with the computer (Figure 8-3). The 40-Megabyte Fixed Disk Drive Backup Expansion Unit kit also includes a DC-2000 tape cartridge, a USER PROGRAMS diskette, and an installation guide.

DC-2000 Tape Cartridge

The DC-2000 Tape Cartridge is used for the optional 40-Megabyte Fixed Disk Drive Backup Expansion Unit (Figure 8-4). The tapes come in packages of five.

360-Kbyte Diskette Drive

The 360-Kbyte Diskette Drive Option Kit consists of a 5 1/4-inch 360-Kbyte diskette drive, a power cable, a set of vibration isolators, a set of screws, a two-drive signal cable, and an installation guide (Figure 8-5).

This diskette drive can replace the 1.2-megabyte diskette drive. This diskette drive reads and writes 360-Kbyte diskettes at 250 Kbits per second.

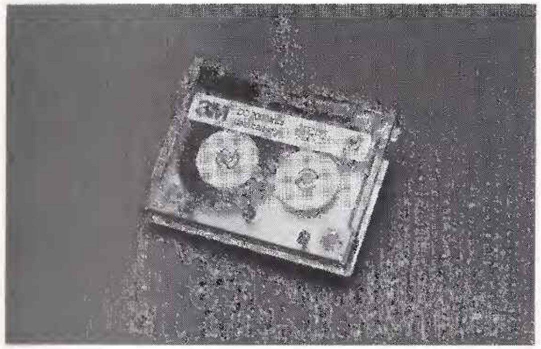


Figure 8-4. DC-2000 Tape Cartridge.

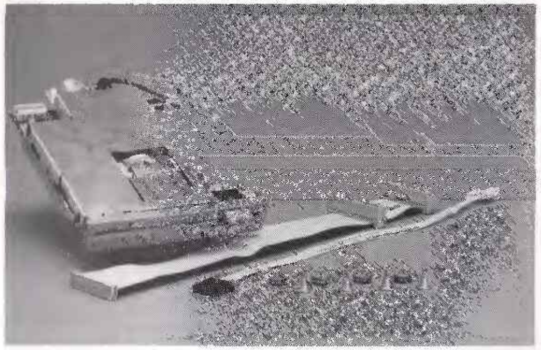


Figure 8-5. 360-Kbyte Diskette Drive Option Kit.

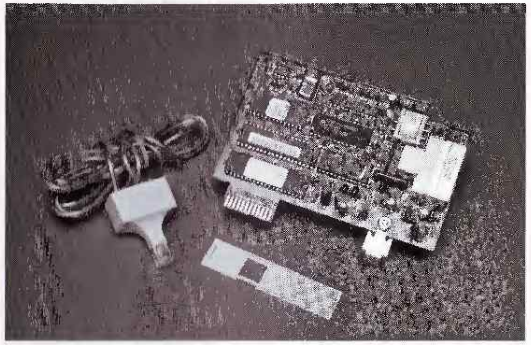


Figure 8-6. COMPAQ 1200 Baud Internal Modem Option Kit.

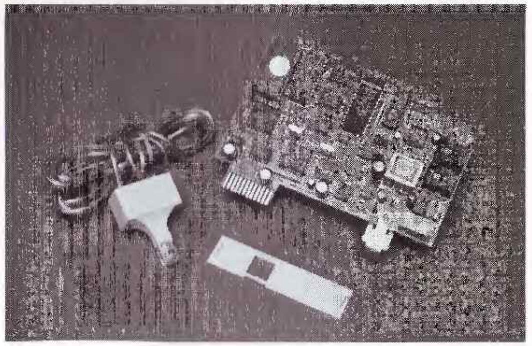


Figure 8-7. COMPAQ 2400 Baud Internal Modem Option Kit.

COMPAQ 1200-Baud Internal Modem

The COMPAQ 1200-Baud Internal Modem Option Kit consists of a Hayes-compatible modem, a modem faceplate, a telephone cord, and an installation guide (Figure 8-6).

The COMPAQ Internal Modem is compatible with Bell 103J and 212A standards for 300 baud and 1200 baud. It is also compatible with CCITT V.22 International Standard 1200 baud. It provides one RJ11 (CA11 in Canada) telephone jack.

COMPAQ 2400-Baud Internal Modem

The COMPAQ 2400-Baud Internal Modem Option Kit consists of a modem compatible with the Hayes Command Set for asynchronous modems, a modem faceplate, a telephone cord, and an installation guide (Figure 8-7).

It is compatible with Bell 103J and CCITT V.21 at 300 Baud, Bell 212A and CCITT V.22 at 1200 Baud, and CCITT V.22 at 2400 Baud.

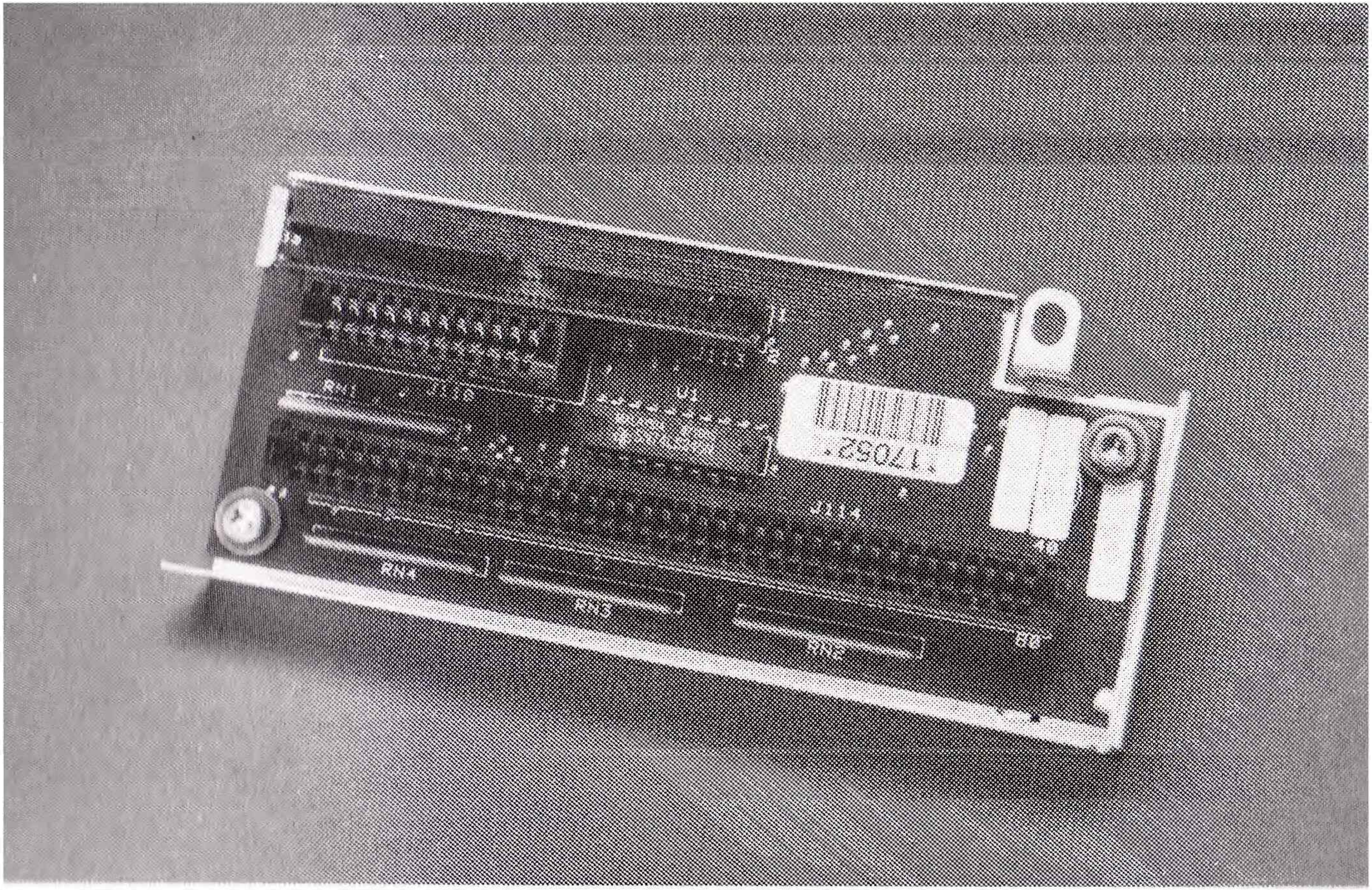

RN1
J110
U1
J114
RN4
RN3
RN2
17052

Figure 8-9. 16-Bit Memory/Modem Interface Board

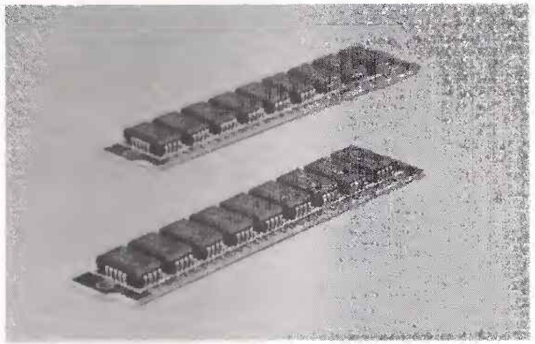


Figure 8-10. 512-Kbyte Memory Option Kit.

512-Kbyte Memory Option Kit

The 512-Kbyte Memory Option Kit consists of two memory modules, each populated with nine 256-Kbit chips, and an installation guide (Figure 8-10).

The memory modules are installed on the COMPAQ Expanded Memory board. When installed, this option increases expansion memory by 512 Kbytes. Table 8-1 shows how the addition of this option increases total system memory.

Table 8-1. Total System Memory with Addition of 512-Kbyte Memory Option Kits

Total System Memory	Number of 512-Kbyte Memory Modules
1.1 Megabytes	1 Memory Option Kit
1.6 Megabytes	2 Memory Option Kits
2.1 Megabytes	3 Memory Option Kits

NOTE: Do not combine 256-Kbyte memory modules and 1-megabyte memory modules on the same memory expansion board.

2-Megabyte Memory Option Kit

The 2-Megabyte Memory Option Kit consists of two memory modules, each populated with nine 1-megabit chips, and an installation guide (Figure 8-11).

The memory modules are installed on the COMPAQ Expanded Memory Board. When installed, this option increases expansion memory by 2 megabytes. Table 8-2 shows how the addition of this option increases total system memory.

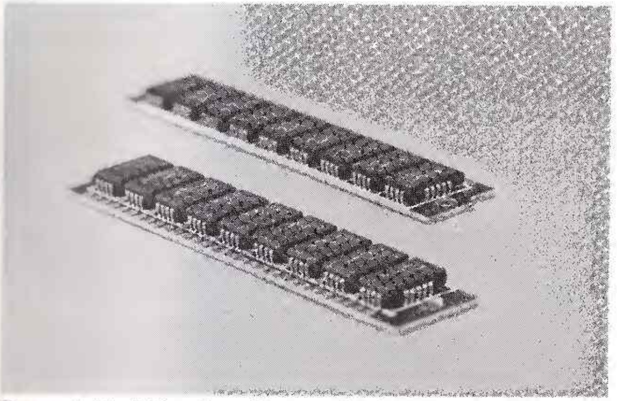


Figure 8-11. 2-Megabyte Memory Option Kit

Table 8-2. Total System Memory with Addition of 2-Megabyte Memory Option Kits

Total System Memory	Number of 2-Megabyte Memory Option Kits
2.6 Megabytes	1 Memory Option Kit
4.6 Megabytes	2 Memory Option Kits
6.6 Megabytes	3 Memory Option Kits

NOTE: Do not combine 256-Kbyte memory modules and 1-megabyte memory modules on the same memory expansion board.

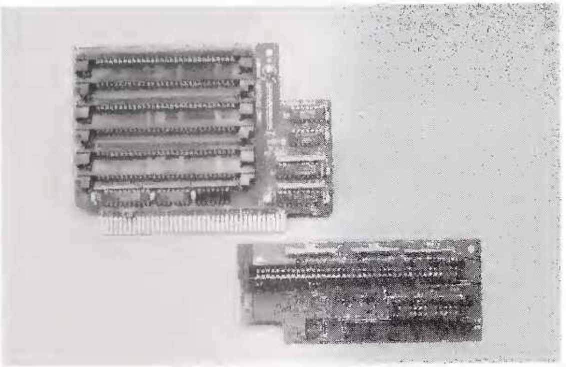


Figure 8-12. Memory Expansion Board and 16-Bit Memory/Modem Interface Board.

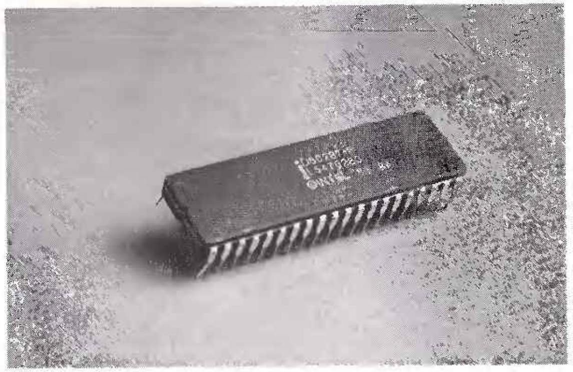


Figure 8-13. 8-MHz 80287 Coprocessor.

Memory Expansion Board

The Memory Expansion Board can provide a maximum expansion memory of either 2.1 megabytes or 6.6 megabytes with the purchase of one, two, or three memory option kits (Figure 8-12).

WARNING

COMPAQ memory options are essential to the performance of the memory expansion board. Adding any other memory modules to this board may cause parity errors.

8-MHz 80287 Coprocessor

The 8-MHz 80287 Coprocessor Option Kit includes the coprocessor and an installation guide (Figure 8-13).

The 8-MHz 80287 coprocessor increases the speed of math-intensive operations. The COMPAQ PORTABLE III Personal Computer requires an 8-MHz version of the 80287 coprocessor.

COMPAQ Color Monitor

The COMPAQ Color Monitor Option Kit includes the color monitor and an installation guide (Figure 8-14).

The COMPAQ Color Monitor is a high-quality color monitor that is compatible with the COMPAQ Enhanced Color Graphics Board and the COMPAQ Video Display Controller Board. With the COMPAQ Enhanced Color Graphics Board, the monitor can display 16 colors simultaneously out of a palette of 64.

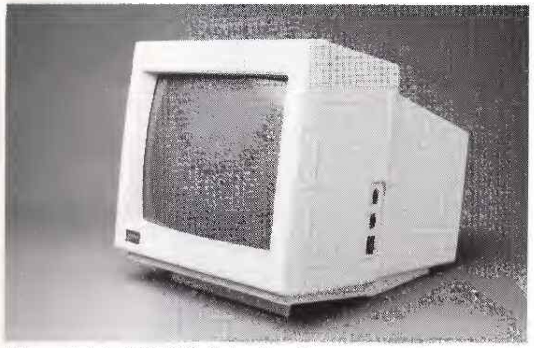


Figure 8-14. COMPAQ Color Monitor.

COMPAQ Enhanced Color Graphics Board

The COMPAQ Enhanced Color Graphics Board Option Kit includes the COMPAQ Enhanced Color Graphics Board and an installation and operations guide (Figure 8-15).

The COMPAQ Enhanced Color Graphics Board operates with the COMPAQ Color Monitor or compatible monitors to display both high-resolution text and graphics in 16 colors simultaneously out of a palette of 64. The color graphics board can be installed in the Expansion Unit.

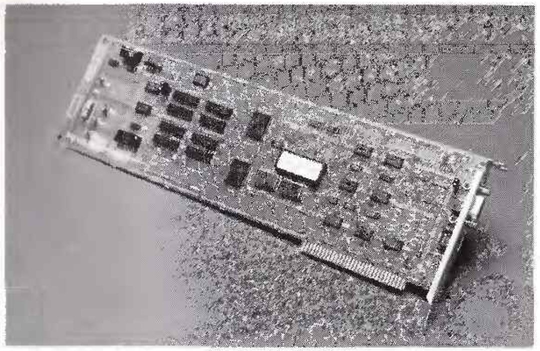


Figure 8-15. COMPAQ Enhanced Color Graphics Board.

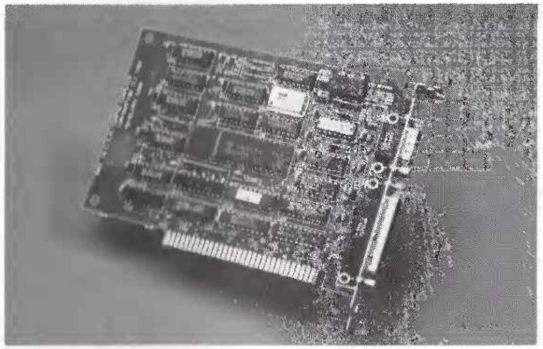


Figure 8-16. Asynchronous Communications/Parallel Printer Board.

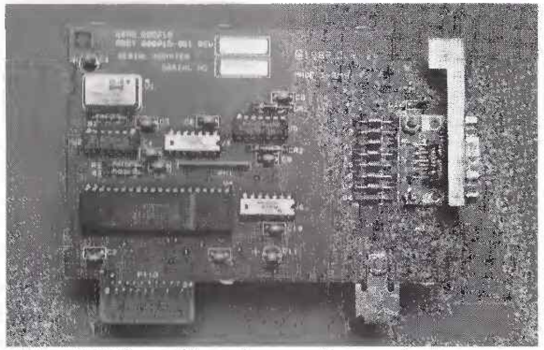


Figure 8-17. Second Asynchronous Communications Interface Board.

Asynchronous Communications/ Parallel Printer Board

The Asynchronous Communications/Parallel Printer Board (Figure 8-16) provides an additional parallel interface and asynchronous communications interface. The parallel interface can be configured as LPT1, LPT2, LPT3, or disabled; with the asynchronous communications interface configured to COM1, COM2, or disabled. This board can be installed in the optional expansion unit.

Second Asynchronous Communications Interface Board

The Second Asynchronous Communications Interface Board provides one additional asynchronous communications interface if an internal modem is not installed. Figure 8-17 shows the second asynchronous communications interface board, which is installed in the modem slot. This is an international option available only outside the U.S. and Canada.

Desktop Pedestal

The Desktop Pedestal Option Kit includes the pedestal and an information card (Figure 8-18).

The Desktop Pedestal makes your COMPAQ PORTABLE III Personal Computer more comfortable to use by raising it to eye level while allowing you to adjust it into a desired viewing position.

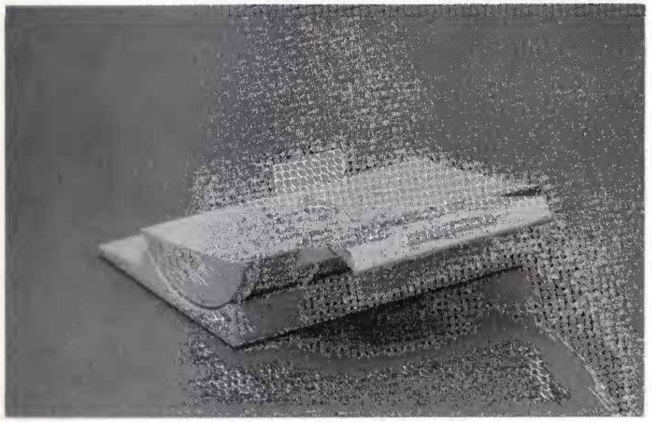


Figure 8-18. Desktop Pedestal.

Carrying Case

The Carrying Case Option Kit includes either a black leather or a black nylon carrying case for the COMPAQ PORTABLE III Personal Computer and an information card (Figure 8-19).

The carrying case features a padded handle, shoulder strap, and a zippered compartment that opens to accommodate the expansion unit, if attached, and other accessories.

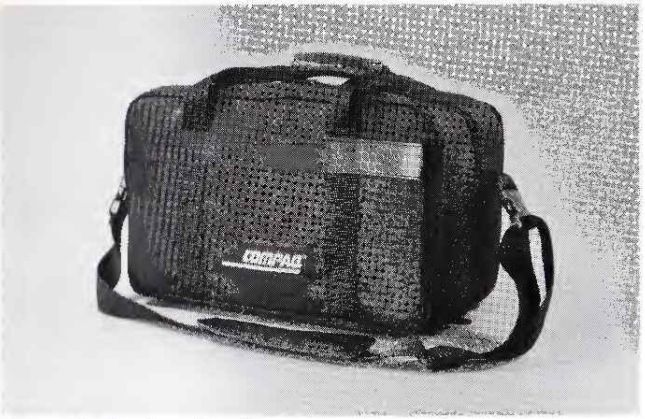


Figure 8-19. Carrying Case.

Figure 8-20. MS-DOS/BASIC VERSION 3.2 Option Kit.

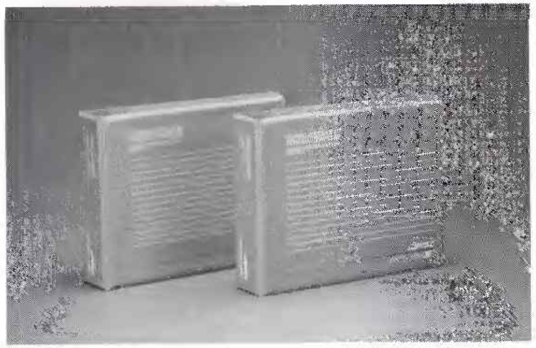


Figure 8-21. *COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE.*

MS-DOS/BASIC Version 3

The MS-DOS/BASIC Version 3.2 Option Kit includes both MS-DOS Version 3.2 and BASIC Version 3.2 as published by Compaq Computer Corporation as well as reference guides for both (Figure 8-20).

The *MS-DOS VERSION 3 REFERENCE GUIDE* defines all MS-DOS commands and utilities in detail. The *BASIC VERSION 3 REFERENCE GUIDE* provides programming instructions as well as BASIC programming commands.

COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE

The *COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE* provides hardware and system ROM information for those who want to write application programs or to design accessories for the COMPAQ PORTABLE III Personal Computer (Figure 8-21).

This book provides detailed information about performance and compatibility aspects of the COMPAQ PORTABLE III Personal Computer.

COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE

The *COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE* provides information on the operation of the COMPAQ Enhanced Color Graphics Board and the COMPAQ Color Monitor (Figure 8-22).

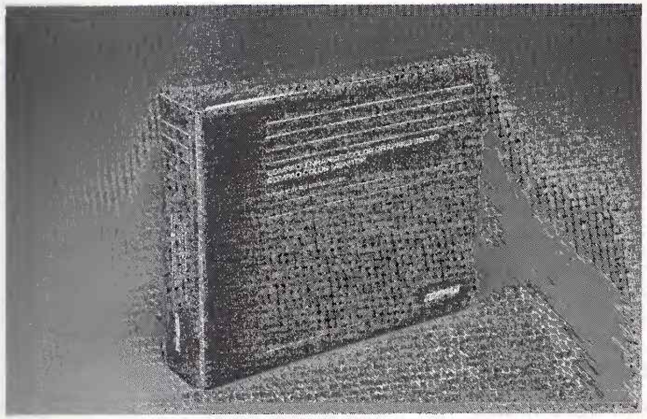


Figure 8-22. *COMPAQ ENHANCED COLOR GRAPHICS BOARD/COMPAQ COLOR MONITOR TECHNICAL REFERENCE GUIDE.*

Appendix A
PHYSICAL AND OPERATING SPECIFICATIONS

CONTENTS

Appendix A
PHYSICAL AND OPERATING SPECIFICATIONS

A.1 ELECTRICAL AND MECHANICAL SPECIFICATIONS A-1
A.2 KEYBOARD ASSEMBLY A-2
A.3 COMPAQ DUAL-MODE PLASMA DISPLAY A-3
A.4 EXPANSION UNIT SPECIFICATIONS A-4
A.5 40-MEGABYTE FIXED DISK DRIVE BACKUP EXPANSION UNIT SPECIFICATIONS A-4

Appendix A
PHYSICAL AND OPERATING SPECIFICATIONS

A.1 ELECTRICAL AND MECHANICAL SPECIFICATIONS

Table A-1 lists the electrical and mechanical specifications for the COMPAQ PORTABLE III™ Personal Computer system unit.

Table A-1. Electrical and Mechanical Specifications

Dimensions:		
Height:	9.8 in (24.8 cm)	
Depth:	7.8 in (19.8 cm)	
Width:	16.0 in (40.6 cm)	
Weight:		
Model 20:	20 lb (9.1 Kg)	
Model 40:	20 lb (9.1 Kg)	
Power Requirements:	**Domestic**	**International**
Nominal Line Voltage:	120 VAC	230 VAC
Range Line Voltage:	102 to 132 VAC	204 to 264 VAC
Line Frequency:	60 Hz	50 Hz
Current:	3 A	2 A
Environmental Requirements:		
Temperature:		
Operating:	50° to 104° F (10° to 40° C)	
Nonoperating:	50° to 140° F (10° to 60° C)	
Shipping:	−22° to 140° F (-30° to 60° C)	
Humidity:		
Operating:	20% to 80% noncondensing	
Nonoperating:	Not less than 5% nor more than 90% noncondensing	
Maximum Unpressurized Altitude:		
Operating:	10,000 feet (3,000 m)	
Nonoperating:	30,000 feet (9,000 m)	

A.2 KEYBOARD ASSEMBLY

Table A-2 lists the specifications for the keyboard assembly.

Table A-2. Keyboard Assembly Specifications

Dimensions:	
Height:	1.2 in (3.0 cm)
Depth:	7.1 in (18.0 cm)
Width:	15.8 in (40.1 cm)
Cable Extended Length:	36.0 in (91.4 cm)
Coil Diameter:	0.8 in (2.0 cm)
Interface:	Industry-standard 5-pin circular DIN-type connector

A.3 COMPAQ DUAL-MODE PLASMA DISPLAY

Table A-3 lists the specifications for the plasma display.

Table A-3 COMPAQ Dual-Mode Plasma Display Specifications

Viewing Area:	
Diagonal:	10.0 in (25.4 cm)
Height:	5.2 in (13.2 cm)
Width:	8.3 in (21.1 cm)
Graphic Resolution:	640 x 400 320 x 200 640 x 200
Text Resolution:	640 x 400
Type:	DC Plasma
Mounting:	Internal
Character Display:	80/40 X 25
Brightness:	Adjustable

A.4 EXPANSION UNIT SPECIFICATIONS

Table A-4 lists the specifications for the expansion unit.

Table A-4. Expansion Unit Specifications

Dimensions:	
Height:	6.05 in (15.2 cm)
Depth:	2.4 in (6.1 cm)
Width:	14.5 in (36.8 cm)

A.5 40-MEGABYTE FIXED DISK DRIVE BACKUP EXPANSION UNIT SPECIFICATIONS

Table A-5 lists the specifications for the 40-Megabyte Fixed Disk Drive Backup Expansion Unit.

Table A-5. 40-Megabyte Fixed Disk Drive Backup Expansion Unit Specifications

Approximate Operating Times (Minutes):	
Backup and Verify:	
Formatted Cartridge:	36
Unformatted Cartridge:	110
Restore:	18
Format Blank Cartridge:	74
Maximum Formatted Capacities:	
Per Tape:	40 Megabytes
Per Track:	2 Megabytes
Per Data Block:	16,384 Bytes
Per Sector:	1024 Bytes

Continued

Table A-5. 40-Megabyte Fixed Disk Drive Backup Expansion Unit Specifications: *Continued*

Mechanical Measurements:	
Tape Width:	0.25 in (.64 cm)
Tape Length:	205 ft (71.8 m)
Tape Speed:	
Read/Write:	50 IPS
Rewind/Fast Forward:	70 IPS
Tape Format:	
Read/Write:	Streaming
Track Pattern:	Serpentine
Number of Tracks:	20
Number of Blocks Per Track:	124
Number of Data Sectors Per Block:	16
Recording Density/Inch:	10000 Bits
Flux Reversals/Inch:	10000
Track Density/Inch:	80 Tracks
Data Encoding Method:	MFM
Data Transfer Rate (BPS):	500K
Error Detection/Correction:	CRC/ECC
Tape Cartridge:	
Read/Write:	DC2000
Read:	DC1000

Appendix B
ERROR CODES

Appendix B
ERROR CODES

ERROR CODES

Appendix B
ERROR CODES

Error codes are an important means of isolating and identifying problems. Table B-1 lists some of the error codes that can be encountered during the Power-On Self-Test phase of booting your COMPAQ PORTABLE III™ Personal Computer. If an error code appears on your plasma display during power-on or system restart, follow the instructions in the chart.

Table B-1. Error Codes

Error Code	Beeps	Probable Cause	Action
101-ROM Error	1L, 2S*	System Error	Contact Dealer
102-System Board Failure	None	System Error	Contact Dealer
102-System or Memory Board Failure	None	System Error	Contact Dealer
162-System Options Error (See NOTE)	2S*	No Diskette Drives or Mismatch in Drive Type	Run SETUP
162-System Options Not Set (Run Setup) (See NOTE)	2S*	System Configuration	Run SETUP
163-Time & Date Not Set	2S*	Invalid Time	Run SETUP
164-Memory Size Error (See NOTE)	2S*	Memory Size Discrepancy	Run SETUP
XX000B YYZZ-201 Memory Error	None	RAM Failure	Contact Dealer
XX000B YYZZ-203 Memory Range Error	None	RAM Failure	Contact Dealer

*L = LONG BEEP, S = SHORT BEEP

Continued

Table B-1. Error Codes: *Continued*

Error Code	Beeps	Probable Cause	Action
301-Keyboard Error	None	Keyboard Failure	Reconnect Keyboard
501-Display Adapter Failure	2S*	Graphics Display Controller	Contact Dealer
601-Diskette Controller Failure	None	Diskette Controller	Contact Dealer
1780-Disk 0 Error	None	Fixed Disk Drive 0 Not Ready	Contact Dealer
1790-Disk 0 Error	None	Fixed Disk Drive 0 Error	Contact Dealer
Resume = **F1** Key	None	Any Failure	Follow Screen Instructions

*L = LONG BEEP, S = SHORT BEEP

NOTE: Error codes 162 and 164 could be encountered after removing an expansion unit and not rerunning SETUP. Press the **F1** key if this is a temporary removal of the unit; otherwise, run SETUP if a permanent reconfiguration of the system occurs.

Appendix C
COMPAQ DUAL-MODE PLASMA DISPLAY APPLICATION INSTALLATION EXAMPLES

CONTENTS

Appendix C

COMPAQ DUAL-MODE PLASMA DISPLAY APPLICATION INSTALLATION EXAMPLES C-1

Appendix C
COMPAQ DUAL-MODE PLASMA DISPLAY APPLICATION INSTALLATION EXAMPLES

The following is a list of several application programs that require special installation procedures when using the COMPAQ Dual-Mode Plasma Display.

Product names mentioned herein are used for identification purposes only, and may be trademarks and/or registered trademarks of their respective companies.

This list in no way constitutes all of the programs that run on the COMPAQ PORTABLE III™ Personal Computer. This list represents tested software products only.

This list in no way constitutes endorsements of any particular program or product, for any particular purpose, by Compaq Computer Corporation. Check the installation procedures for each product, as they may have changed since publication of this book.

ANSA SOFTWARE

PARADOX

Install according to the instructions provided with the product. Installs as CGA.

ASHTON-TATE

DBASE III PLUS

Install according to the instructions provided with the product. Installs as CGA.

FRAMEWORK II

Install according to the instructions provided with the product. Select option : (1) A11 AST, AT&T, and COMPAQ drivers. Then select option: (2) AT&T PC 6300 (Olivetti M24). This will install in 640 × 400 graphics mode.

MULTIMATE ADVANTAGE

Install according to the instructions provided with the product. Use Advanced Utilities to Modify Console Defaults for proper background, foreground, and highlighting attributes.

CHARTMASTER

Install according to the instructions provided with the product. Currently does not support the 640 × 400 mode. Install as CGA.

AUTODESK

AUTOCAD

Does not currently support the 640 × 400 mode. Install according to the instructions provided with the product. Install as CGA.

BORLAND INTERNATIONAL

TURBO LIGHTNING

Does not currently support the 640 × 400 mode. Install according to the instructions provided with the product. Install as CGA.

Make the default directory the TURBO Lightning directory (usually \LIGHT).

Type LIGHTINS at the DOS prompt.

From the "Lightning Installation Menu", select "change screen type" by either pressing S or the ENTER key.

The next screen displayed will be the "Install display type". Select "B/W display 80 × 25" by pressing the down arrow key three times and then pressing ENTER when the option is high-lighted.

Continue the installation procedure.

NOTE: Re-invoke the TURBO Lightning system to make the changes effective.

SIDEKICK

Does not currently support the 640 × 400 mode. Install SIDEKICK according to the instructions provided with the product.

Make the default directory the SIDEKICK directory (usually \SK).

Type SKINST.

From the "Sidekick Installation Menu", select "change screen type" by either pressing S or the ENTER key.

The next screen displayed will be "Install display type". Select "B/W display 80 × 25" by pressing the number three key and then pressing the ENTER key when the option is high-lighted.

Continue the installation procedure.

NOTE: Re-invoke the SIDEKICK system to make the changes effective.

TURBO BASIC

Does not currently support the 640 × 400 mode. Install according to the instructions provided with the product. Use the install program TBINST to set the following parameters running TURBO BASIC.

Type S to select Screen Mode.

Type B to select Black and White.

Type Q to Quit.

Save changes to TB.EXE.

DIGITAL RESEARCH, INC.

GEM DESKTOP

Install according to the instructions provided with the product. When installing the GEM Master System, select the AT&T Monochrome Card (640 × 400) display driver.

JAVELIN

JAVELIN

Install according to the instructions provided with the product. No 640 × 400 driver. Follow install instructions to configure as Compaq:

(Q)	(A)
- Does your screen show RGB?	N
- Does your screen show the letter E? (COMPAQ style screen)	Y
- Are you using a flat panel?	Y
- Does screen show text with underlining?	N
- Choose the manufacturer of your screen	Compaq

Appendix D
GLOSSARY

INDEX

LOTUS DEVELOPMENT CORPORATION

LOTUS 1-2-3

Install according to the instructions provided with the product. Install using the AT&T 640 × 400 single color driver or the AT&T 640 × 400 50 line mode driver for a single screen system.

A dual-screen system requires the internal plasma screen to be jumpered to monochrome when using an EGA or other color display adapter in the expansion unit. In this configuration, the installation defaults to a monochrome driver for the text screen and EGA or CGA for the external graphics display.

The IBM and the COMPAQ drivers both work, but the COMPAQ driver is somewhat faster.

SYMPHONY

Same as 1-2-3, but Symphony does not have the 50 line mode.

FREELANCE PLUS

Install according to the instructions provided with the product. Does not currently support 640 × 400. Install as CGA.

MICROPRO INTERNATIONAL CORPORATION

WORDSTAR

Does not support the 640 × 400 mode. Install according to the instructions provided with the product. Install as CGA.

WORDSTAR 2000

Does not support the 640 × 400 mode. Install according to the instructions provided with the product. Install as CGA.

EASY!

Install according to the instructions provided with the product. Follow installation menus and select the COMPAQ option.

MICRORIM, INC.

R:BASE 5000 SYSTEM V

Install according to the instructions provided with the product.

MICROSOFT

WINDOWS 1.03

Install according to the instructions provided with the product. Select option 7 during SETUP: AT&T PC 6300 or 6300+ display adapter (for 640 × 400 graphics mode).

WORD 3.1

Install according to the instructions provided with the product. AT&T 6300 640 × 400 25 line by 80 column 2 color mode activated by typing WORD at the DOS prompt (follow instructions for the Toshiba 310 in the installation documentation).

SOFTWARE PUBLISHING

HARVARD PROFESSIONAL PUBLISHER

Install according to the instructions provided with the product. Does not support 640 × 400 mode.

HARVARD PRESENTATION GRAPHICS

Install according to the instructions provided with the product. Does not support 640 × 400 mode.

SYMANTEC

Q&A

Install according to the instructions provided with the product. Q&A will install automatically on all COMPAQ products. The Q&A word processor supports on-screen underlining on COMPAQ products. To use this feature, include the MODE UND=ON command in the AUTOEXEC.BAT file or the batch file used to execute Q&A.

VERSACAD

VERSACAD

Install according to the instructions provided with the product. Select AT&T PC 6300 640 × 400 mode.

Appendix D GLOSSARY

INDEX

WORDPERFECT

WORDPERFECT

Install according to the instructions provided with the product. WordPerfect will install automatically on all COMPAQ products. WordPerfect supports on-screen underlining on COMPAQ products.

Select option (2) Underline Displayed as underline. Select single color monitor menu under the Screen function (CTRL F3). To use this feature, include the MODE UND = ON command in the AUTOEXEC.BAT file or the batch file used to execute WordPerfect.

XEROX

VENTURA PUBLISHER

Install according to the instructions provided with the product. Use a driver for the AT&T 6300 or Xerox 6065.

Appendix D
GLOSSARY

CONTENTS

Appendix D

GLOSSARY D-1

Appendix D
GLOSSARY

A

ADAPT	Advanced Display Attribute Programming Tool. Program for modifying display attributes.
application software	Software designed to accomplish specific tasks for the user, such as telecommunications, word processing, spreadsheets, and data bases.
ASCII	American Standard Code for Information Interchange; a standardized code that assigns a number to printable characters and control instructions in your computer.
asynchronous communications interface	Interface that transmits and receives data in a serial manner; that is, a single wire transmits data one bit at a time, while another wire is used to receive data one bit at a time.
ATTRIBUTE	Certain distinguishing characteristics that describe an MS-DOS file.
auto line switching	See automatic line selecting feature.
automatic line selecting feature	A feature that allows the COMPAQ PORTABLE III™ to determine the input voltage and automatically make the required adjustments. The user does not need to reconfigure the system when switching between 110 volts and 220 volts.
AUTOEXEC.BAT file	A batch file that the computer performs when it boots under MS-DOS. See also batch file.

B

backup	A second copy of data on a diskette or other medium to provide for recovery from loss or destruction of the original media.
batch file	A batch file is a special file containing commands that the computer performs without any intervention from the user.
BIOS	The BIOS (Basic Input/ Output System) is the software that starts the system. The BIOS is stored in ROM.
bit	The smallest unit of information recognizable by a computer. It can have a value of 1 or 0.
break	An interruption of a program currently in process.
boot	To start up your computer system. To start up a program by loading it from a diskette or fixed disk.
byte	The amount of space needed to store a single character.

C

central processing unit (CPU)	A powerful electronic chip that is the main controller and data processor for the system. Its function is to move and change the data. The CPU used by the COMPAQ PORTABLE III Personal Computer is an 80286 microprocessor.

CGA	An acronym for Color Graphics Adapter.
CHARSET	A program that allows you to load different character sets for use by the plasma display.
command	A series of one or more words that tell the computer to start, stop, or perform a series of operations.
configuration	The amount and kind of hardware in a given computer system.
CONFIG.SYS file	A file created to store changes to MS-DOS instructions. The CONFIG.SYS file stores configuration commands that give certain instructions to the computer every time that it is turned on or reset.
coprocessor	A chip for math-intensive operations.
cursor	A highlighted or blinking small box or line on the screen that marks your current position.

D

data	A general term used to signify all the basic information that can be produced or processed by a computer.
data base manager	A program that takes information and stores it for selective display and retrieval. A data base manager can structure thousands of pieces of information and selectively retrieve, combine, compare, display, and print the results.

device	Any piece of computer hardware, usually involved in input to or output from the computer.
device driver	A program that controls various external peripherals.
DIAGNOSTICS program	A test program designed to detect any possible failure of your computer.
disk drive	A device used for storing and retrieving data on magnetic disks. There are two types of disk drives: a diskette drive and a fixed disk drive.
diskette	A plastic disk with a magnetic coating, housed inside a protective sleeve.
diskette drive	A device that holds a diskette so that the CPU can read data from or write data to it.
DISKINIT	An MS-DOS program that creates a system disk. If you have a fixed disk, this program formats the disk, creates partitions, copies the system files and utilities to the formatted disk and creates the CONFIG.SYS and AUTOEXEC.BAT files on the formatted disk.
dual-mode plasma display	A feature of the plasma display that allows the display of graphics and high-resolution text on the same device.

E

error code	A visual indication of a hardware or software malfunction.

F

file	A collection of related data or programs that is treated as a unit by the computer.
fixed disk drive	A fixed disk enclosed in a permanently sealed housing that is used for storing large amounts of data.
format	A predetermined arrangement of data that structures the storage of information on a diskette or fixed disk.
function keys	Specific keys on the keyboard that, when pressed, instruct the computer to perform a particular operation.

H

hardware	The actual machinery and circuits in a computer system, such as the keyboard, display panel, processor, and fixed disk drive.

I

input device	Any device used to send information to your computer, including a keyboard or a modem. The keyboard is the computer's primary input device.

K

Kbyte	An amount of storage equal to 1024 bytes.
keyboard	The primary means of sending information to the microprocessor.

L

LED indicator	An acronym for Light Emitting Diode.

M

mass storage device	A device that reads, writes, and stores programs and data files.
MDA	An acronym for Monochrome Display Adapter.
megabyte	An amount of storage equal to 1,048,576 bytes.
memory module	A very small board populated with 9, 1-Megabyte chips or 9, 256-Kbit chips. These memory modules are installed on a memory expansion board.
menu	A display of choices presented by a program that allows the user to select the function that the program will perform.
microprocessor	See central processing unit.
modem	A modulator/demodulator device that converts information from the computer into audible sounds for transmission to another computer via telephone lines.

O

operating system	Programs that control the computer's interaction with mass storage devices, such as diskette drives and fixed disk drives. Operating systems also provide a way of manipulating your data.
option	An add-on device that expands a system's capabilities.
output	Communication from your computer. This includes data sent to disk, hardcopy printout, or data that appears on your screen.
output device	Any device to which data can be sent from the microprocessor. The primary output device on the COMPAQ PORTABLE III Personal Computer is the COMPAQ Dual-Mode Plasma Display.

P

parallel interface	A standard 25-pin parallel interface for connecting a printer. Parallel communication occurs when data is transmitted or received on multiple wires in a "pulsed-together" format.
peripheral	Any device that connects to a computer. This can include diskette drives, fixed disk drives, modems, or printers.

plasma display	The primary means of displaying information, such as text and numbers. Combined with this unit is a video controller board that operates in both text and graphics modes.
program	A series of steps that tell a computer how to solve a problem or perform an operation.
prompt	A character or series of characters that appears on the display to request input from the user.

R

Random-Access Memory (RAM)	The area where the COMPAQ PORTABLE III Personal Computer stores programs for the microprocessor. Programs in this area may be accessed in any order designated by the microprocessor. Data that is stored in RAM is lost when the system power is turned off.
Read-Only Memory (ROM)	A type of memory that contains permanent data or instructions. The computer can read from, but not write to, the read-only memory. Data stored in ROM is not erased when the computer is turned off.

real-time clock	A device that allows your programs to use the time of day and the current date. It also allows you to set the timing of a program, keep a calendar, and automatically measure elapsed time.

S

scratch diskette	A blank formatted diskette used during testing.
serial communications	Sending only one bit at a time to and from interconnected devices. See asynchronous communications interfaces.
SETUP	A program used to store information about your machine configuration in a memory device and set the real-time clock/calendar.
software	A program or set of instructions that tells your computer what to do.
spreadsheet	A program that allows you to put numeric values into tabular form. With little or no programming experience, you can create your own "what if" models and let the program calculate the results. Spreadsheets can prepare pricing strategies, create forecasts, and do financial modeling.
system	A collection of hardware, software, and firmware that is interconnected to operate as a unit.
system software	There are two types of system software: BIOS and operating systems.

T

telecommunication software	Telecommunication software together with a modem lets you send and receive information through a telephone line. The modem converts electronic signals into sounds for transmission over telephone lines. The telecommunication software contains the instructions that the computer needs to operate the modem.

W

word processing	Software programs that allow you to write text. You can correct spelling mistakes; copy, move, or delete text; or search for and replace specific words and phrases — all with a minimum amount of effort. Word processing software also allows you to create individualized copies of a form letter.
write protect	A way of preventing any changes from being made to a diskette.

INDEX

CONTENTS

INDEX I-1

INDEX

A

Accessing the System Board 7-1
ADAPT 6-2
Adjusting the Plasma Display Brightness 2-12
Asynchronous Communications Interface 2-7
Asynchronous Communications/Parallel Printer Board 8-12
Automatic Line Selecting Feature 1-6
Auto Speed 2-10

B

16-Bit Memory/Modem Interface 8-7
Brightness, Plasma Display 2-12

C

Cable Storage Tray 2-3
Carrying Case 8-13
Central Processing Unit (CPU) 7-1
Change CPU Speed (Multiple Keystroke) 5-2
CHARSET 6-8
  Using CHARSET 6-8
COMPAQ Color Monitor 8-11
COMPAQ Dual-Mode Plasma Display 6-1
  Features 6-1
COMPAQ Enhanced Color Graphics Board 8-11
COMPAQ 1200 Baud Internal Modem 8-5
COMPAQ 2400 Baud Internal Modem 8-6
COMPAQ PORTABLE III PERSONAL COMPUTER TECHNICAL REFERENCE GUIDE 8-14
Connecting the Computer to a Power Source 2-8
Connecting Peripheral Devices 2-7
Copy a Diskette (Diagnostics Only) 3-8
Copying Diskettes 3-10

D

Decrease Keyclick Volume 5-1
Desktop Pedestal 8-13
DIAGNOSTICS Main Menu 3-8
DIAGNOSTICS Program 3-7

Disconnecting the Power Cord and Peripheral Devices 4-1
Diskette Drive 2-6
DISKINIT 3-9
Display ROM Versions 3-8
Drive Positions 2-4
Drive Type 2-5

E

Electrical and Mechanical Specifications A-1
Expansion Unit 8-6
  Specifications A-4
External Monitor Selection
  MODE Select 6-6
  Multiple Keystroke 5-1

F

Fast Speed 2-10, 7-1
Features 1-6
Fixed Disk Drive 2-5
Format a Diskette (Diagnostics Only) 3-8
Function Keys 5-1

H

Halt Action Temporarily (Pause) 5-2
High Speed 2-10, 7-3

I

Identifying the Interfaces 2-7
Increase Keyclick Volume 5-1
Initializing the Fixed Disk 3-9
Inserting a Diskette 2-8
Installed Device List 3-8

K

360-Kbyte Diskette Drive 8-5
512-Kbyte Memory Option Kit 8-7
Keyboard A-2
Keyboard Latches 2-2

L

LED Indicators 2-5
  Diskette Drive 2-6
  Keyboard 2-5
  Location 2-5
Lowering the COMPAQ Dual-Mode Plasma Display 4-2

M

Manual Conventions 1-5
2-Megabyte Memory Option Kit 8-9
40-Megabyte Fixed Disk Drive 8-3
40-Megabyte Fixed Disk Drive Backup Expansion Unit 8-4
Memory Expansion Board 8-10
8-MHz 80287 Coprocessor 8-10
MODE 6-5
MODE ATT 6-5
MODE Command 6-5
MODE SCREEN-SAVE 6-5
MODE SELECT 6-6
MODE UNDERLINE 6-7
Model 20 1-6
Model 40 1-6
Moving Your Computer 4-1
Multiple Key Functions 5-1

O

ON/OFF Switch Location 2-9
Operating System 1-1
Operating Speeds 2-10
Option 8-1

P

Parallel Printer Interface 2-7
Pause 5-2
Plasma Display Features 6-1
Plasma Display Selection
  MODE SELECT 6-6
  Multiple Keystroke 5-1

Plasma Display Specifications A-3

Positioning the COMPAQ Dual-Mode Plasma Display 2-3

Power/Drive Light-Emitting Diode (LED) Indicators 2-5

Print Screen 5-2

R

Random-Access Memory (RAM) 4-1

Read-Only Memory (ROM) 3-1

Real-Time Clock 1-6

Removing the Rear Panel 7-2

Replacing the Rear Panel 7-4

Reverse Video 6-5

Resuming Action After a Pause 5-2

Running the Diagnostic Tests 3-7

Running SETUP 3-6

S

Saving Your Files 4-1

Screen-Save 3-2

Second Asynchronous Communications Interface 8-12

Securing the Keyboard 4-2

Setting up the Display Parameters 6-4

Setting the Jumpers 7-4

Setting the System Board Switch 7-3

SETUP 3-6

Speed
- Auto 2-10
- Fast 2-10
- High 2-10

System Self-Test 2-9

System Reset 5-1

T

Terminate (Abort) an Operation 5-2
TEST 3-7
Text Characteristics 6-3
Toggle 5-2
Turning on the Computer 2-9

U

Using CHARSET 6-8
Using the MODE Command to Set Highlighted Text 6-5
Using SETUP to Set Highlighted Text 6-4
USER PROGRAMS 3-1
Underline 6-7
USER DIAGNOSTICS 3-1

COMPAQ PORTABLE III™ *Personal Computer*
OPERATIONS GUIDE
USER SURVEY*

Compaq Computer Corporation is dedicated to providing you with quality documentation. However, this can only be accomplished with your help. We are, therefore, requesting that you take a few minutes to read through this survey form.

Then, when you have used the manual, please answer the questions listed below–and drop this prepaid form in the mail.

Thank you for taking the time to assist us.

	Excellent	Good	Fair	Poor
1. Organization of guide.	____	____	____	____
2. Usefulness of examples.	____	____	____	____
3. Clarity of information.	____	____	____	____
4. Completeness of information.	____	____	____	____
5. Layout of manual (ease of use).	____	____	____	____
6. Appropriateness to your experience level.	____	____	____	____
7. Overall rating.	____	____	____	____

8. How much experience have you had with personal computers?

none ____ 0-6 months ____ 6 months-1 year ____ 1 year or longer ____

9. Please list any errors found in this guide:

Error	Page
____________________	________
____________________	________
____________________	________
____________________	________

10. Please provide any additional comments or suggestions below:

____

____

____

(Optional)

Name ____________________ Company ____________________

Street ____

City ____________________ State ____________ Zip ____________

9-87